

SUPPLEMENTARY INFORMATION

Electrospun Carbon Nanodot-Doped PVDF Nanofibers with Enhanced Crystallinity, Hydrophobicity and UV Resistance

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Table 1: Nanofibers diameter (Figure 4c,f,i,l) data of the PVDF and PVDF/CNDs electrospun nanofibers samples (with various CNDs concentrations).

Description: Table 1 contains the fibers' diameter data in nanometers (nm) dimensions with each column representing the average fibers' diameter uniformity and distribution of the PVDF or PVDF/CNDs nanofiber sample with different CNDs concentration.

Diameter			
nm			
PVDF	PVDF/1.25% CNDs	PVDF/2.5% CNDs	PVDF/5% CNDs
521.72	684.21	421.05	651.02
521.72	684.21	526.32	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	651.02
521.72	684.21	383.16	166.44
260.86	684.21	383.16	166.44
260.86	268.37	383.16	166.44
260.86	268.37	383.16	166.44
260.86	268.37	383.16	166.44
260.86	268.37	383.16	166.44
260.86	268.37	383.16	166.44
260.86	268.37	383.16	166.44
417.38	105.26	383.16	578.95
417.38	105.26	383.16	578.95
379.82	105.26	383.16	578.95
379.82	105.26	383.16	578.95
379.82	105.26	383.16	578.95
407.48	105.26	383.16	578.95
407.48	210.53	383.16	578.95
407.48	210.53	383.16	578.95
407.48	559.48	383.16	578.95
634.7	559.48	383.16	578.95
634.7	559.48	485.24	578.95

634.7	559.48	485.24	473.68
634.7	559.48	485.24	473.68
626.06	559.48	485.24	473.68
626.06	559.48	485.24	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	473.68
626.06	559.48	588.44	263.16
730.41	559.48	588.44	263.16
730.41	559.48	578.95	263.16
730.41	559.48	578.95	485.24
730.41	559.48	578.95	485.24
730.41	559.48	578.95	485.24
730.41	559.48	578.95	485.24
730.41	559.48	578.95	485.24
730.41	559.48	578.95	485.24
313.03	559.48	578.95	485.24
313.03	559.48	368.42	485.24
313.03	559.48	368.42	485.24
313.03	559.48	368.42	485.24
313.03	559.48	368.42	485.24
313.03	559.48	368.42	485.24
521.72	559.48	368.42	485.24
521.72	559.48	424.33	485.24
521.72	559.48	424.33	485.24
368.91	559.48	424.33	526.32
368.91	559.48	424.33	526.32
368.91	424.33	157.89	526.32
472.44	424.33	157.89	526.32
472.44	421.05	157.89	526.32
472.44	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	526.32
481	421.05	157.89	473.68
481	421.05	157.89	473.68
481	421.05	157.89	473.68
481	421.05	157.89	473.68
481	421.05	157.89	473.68

481	421.05	263.16	473.68
417.38	421.05	263.16	473.68
417.38	421.05	263.16	315.79
417.38	421.05	263.16	315.79
417.38	421.05	263.16	315.79
417.38	421.05	263.16	315.79
417.38	421.05	263.16	315.79
417.38	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	315.79
610.66	421.05	263.16	379.53
610.66	421.05	263.16	379.53
610.66	421.05	263.16	379.53
610.66	421.05	446.59	379.53
610.66	315.79	446.59	379.53
420.62	315.79	446.59	379.53
420.62	315.79	446.59	379.53
420.62	315.79	446.59	379.53
420.62	315.79	446.59	379.53
420.62	315.79	446.59	379.53
420.62	315.79	421.05	379.53
420.62	315.79	421.05	379.53
420.62	315.79	421.05	379.53
420.62	315.79	421.05	379.53

Table 2: X-ray Diffractograms (Figure 6a) data of the PVDF and PVDF/CNDs (with various CNDs concentrations).

Description: Table 2 contains the X-ray diffraction analysis data of the PVDF and PVDF/CNDs nanofibers with various CNDs concentrations with two-theta (2-theta) in degrees and X-ray intensity in arbitrary unit (a.u).

2-theta	PVDF	PVDF/1.25% CNDs	PVDF/2.5% CNDs	PVDF/5% CNDs
5	57.28583944	166.0960044	85.69635264	72.05497067
5.02	66.63030865	156.629618	88.77793695	79.59737977
5.04	75.69932976	147.7954416	91.67880633	86.84382794
5.06	84.49290277	139.593475	94.39896076	93.7943152
5.08	93.01102768	132.0237184	96.93840027	100.4488415
5.1	101.2537045	125.0861716	99.29712484	106.807407
5.12	109.2209332	118.7808348	101.4751345	112.8700115
5.14	116.9127138	113.1077079	103.4724292	118.6366551
5.16	124.3290463	108.0667908	105.2890089	124.1073377
5.18	131.4699308	103.6580837	106.9248737	129.2820595
5.2	138.3353671	99.88158648	108.3800236	134.1608204
5.22	144.9253553	96.73729917	109.6544586	138.7436203
5.24	151.2398954	94.22522176	110.7481786	143.0304593
5.26	157.2789874	92.34535426	111.6611837	147.0213374
5.28	163.0426314	91.09769666	112.3934738	150.7162546
5.3	168.5308272	90.48224896	112.945049	154.1152108
5.32	173.4830569	92.08750025	112.0271463	157.6568308
5.34	177.7228608	94.73164021	111.1072626	160.707295
5.36	181.9734756	98.04668622	110.0831429	163.6899737
5.38	185.8857781	101.4409374	108.9515411	166.0826079
5.4	190.2052311	105.4120558	107.9301588	168.195856
5.42	194.3230761	109.256759	107.2253474	170.1755294
5.44	198.2355749	112.8411053	106.5966124	171.7482031
5.46	201.7916989	116.7685459	106.4552351	172.5684488
5.48	204.9745728	120.8931095	106.6668561	173.329365
5.5	207.3699393	124.1313581	107.0824573	173.7645141
5.52	209.8142896	127.1214814	107.3491202	173.5833552
5.54	212.278557	130.7778906	108.2360077	172.4989948
5.56	214.7263798	133.2272849	108.9067206	171.4976307
5.58	217.0682132	134.6060006	109.8615755	169.8602073
5.6	220.0348903	136.0533815	111.0094367	167.5598129
5.62	222.9641996	137.4665103	112.579731	164.7854657
5.64	224.569733	138.296488	114.2205157	162.742704
5.66	225.2190323	139.1093144	116.08667	160.4460451
5.68	225.2928658	140.6895591	118.0275316	157.9748953
5.7	225.2771807	142.4767216	120.7337678	155.7517626
5.72	224.7725827	144.3082091	123.8084174	153.3128112
5.74	223.4955729	145.7441319	126.8182071	151.0428628
5.76	221.5606836	146.970001	129.4960906	148.9000243
5.78	220.7828476	148.1644898	131.6129942	146.6876894
5.8	220.464596	149.9696491	133.6966266	143.6601375
5.82	220.1646597	150.7115199	135.9609971	140.3465254
5.84	220.2607604	150.7811629	138.1675104	136.9291647
5.86	220.8874153	150.9895945	140.1950642	132.9301679
5.88	221.0813308	150.8731115	142.0103782	128.427118
5.9	219.8457488	149.6124755	143.9012468	123.9947103
5.92	218.443062	148.5107109	145.4132369	119.3303802
5.94	216.3471069	147.1194994	147.1504581	114.595137
5.96	214.0754272	145.5871554	148.4410739	110.0452745
5.98	210.7456275	143.369098	150.028107	105.1155162

6	208.0151947	141.9176803	151.9471686	100.4379644
6.02	204.8410739	139.9591283	154.2930681	96.06665386
6.04	201.546394	137.2902548	157.1527536	92.03097078
6.06	197.7679765	134.4194883	160.4368126	88.19742037
6.08	194.3564	131.7236182	164.1316392	84.61282637
6.1	190.6641713	128.4013186	167.2192396	81.50786126
6.12	187.0339589	125.8416867	170.1686439	78.3855405
6.14	183.8475083	123.8762827	173.3365133	75.54429872
6.16	180.5693943	121.5917595	175.7097836	73.46848215
6.18	177.9434857	119.5611376	177.8554252	72.17989483
6.2	176.357748	119.0706462	179.7952675	71.23586915
6.22	174.8841076	119.6297169	181.2077247	70.97246132
6.24	173.848376	120.5572454	182.0031156	71.33968955
6.26	173.7786814	123.5064304	182.7215158	71.49109718
6.28	173.6462504	128.3334968	183.2474426	72.76660229
6.3	172.6523268	133.5234675	183.2353544	74.45090505
6.32	171.420453	139.5242451	182.4899808	76.24378501
6.34	171.6341187	145.7709	180.7522409	77.89405906
6.36	172.9430852	152.5161766	178.1807898	78.75654363
6.38	175.4735646	158.8133947	174.7606533	79.21648094
6.4	178.4256052	164.514146	170.4424896	78.7913692
6.42	181.6246971	169.4152048	165.2881484	78.81835878
6.44	184.4818	174.9742623	159.4795803	78.61153807
6.46	187.2909981	180.0876833	153.3181393	78.00596319
6.48	189.7109111	184.7773172	147.2780504	76.92648094
6.5	191.5954677	188.1225109	140.8099009	76.31825362
6.52	192.8538184	191.6277591	134.4574355	75.31118414
6.54	193.9465426	194.8527617	128.4360127	74.49907574
6.56	194.8787046	197.4300222	122.9203337	74.22224795
6.58	195.6314147	198.7401082	118.3068136	74.14559106
6.6	196.4537375	199.3759318	113.9221104	74.42976034
6.62	196.1300799	198.8138305	110.4533664	74.6820002
6.64	195.6530296	197.7859379	107.9718182	75.10114572
6.66	194.0530124	196.4543998	106.1395176	75.4660087
6.68	192.6398534	194.5920508	105.1130873	76.60468601
6.7	190.2439943	191.2392396	103.9293518	78.47902215
6.72	188.2859662	187.2238487	103.4848438	80.51532106
6.74	186.3756457	183.2621317	103.2427991	83.15032966
6.76	184.6986288	179.3647598	102.9145748	86.27735767
6.78	183.6627	175.5763262	102.6212529	89.72564769
6.8	183.0536101	172.3807564	102.4610537	92.71813025
6.82	182.3423167	169.4926413	101.956851	96.19150268
6.84	182.1948417	167.5066791	101.1334432	99.78100313
6.86	182.4748084	166.8410507	100.2132268	103.5652139
6.88	182.9616372	167.1743644	99.01169785	106.9460936
6.9	183.5278967	167.19153	97.41273334	109.501168
6.92	184.8297472	167.3455698	96.23041966	111.5070937

6.94	186.618648	167.1764536	94.37895743	113.2396016
6.96	187.9080038	166.2199019	92.34073617	114.5726626
6.98	189.1833016	164.2245171	89.92670846	114.7140409
7	191.3522823	161.9833168	87.13770755	114.3163545
7.02	193.7234867	159.4256376	84.24422591	113.5843331
7.04	196.1286551	157.0529133	81.47631914	111.7624118
7.06	198.6518819	153.7764071	79.10054606	109.8801042
7.08	201.6546183	150.5931277	76.94298918	107.7844211
7.1	204.3616463	147.3948064	74.51687127	105.9359197
7.12	207.0421519	144.8839589	71.96527354	103.5665952
7.14	210.367208	141.4653302	69.50129639	101.0438376
7.16	213.5555223	137.6510082	67.40543634	98.52127617
7.18	215.7666498	133.8421398	65.57925675	96.097297
7.2	217.7219921	130.5589534	64.05289615	93.50104561
7.22	219.5337719	127.0259693	63.16241278	90.82235615
7.24	220.7878582	122.1571726	63.01097482	88.43118718
7.26	221.2687157	116.2924229	62.83730711	85.9271625
7.28	220.72775	109.8807918	62.54767115	83.80177065
7.3	219.0512307	103.6929184	62.23325918	81.26655476
7.32	216.8097138	97.87897563	61.90778036	78.77333603
7.34	212.5360077	92.27651128	61.24057134	76.40190009
7.36	208.4265295	86.31098898	60.31260896	74.39593488
7.38	203.0545869	81.03370108	58.99313985	72.18811811
7.4	197.0037345	75.90851148	57.72867226	70.17906967
7.42	190.4431732	71.5235676	56.12598847	68.53642026
7.44	184.0115967	68.11842451	54.33489534	66.60405097
7.46	177.2999282	64.93144201	52.51095257	64.57289817
7.48	169.8434816	62.62282435	50.64497927	62.47313682
7.5	161.7867327	60.96578623	49.1926039	60.99742542
7.52	153.819458	59.30717666	48.50871777	59.84574274
7.54	145.8083598	57.45851047	47.85180402	59.2093963
7.56	137.8500172	55.25758924	47.57181211	58.24410658
7.58	130.7366043	53.00375973	47.41773688	56.67191526
7.6	124.41135	52.16882395	47.74409647	55.51636667
7.62	118.5544069	51.97232582	48.2887026	54.56588634
7.64	112.7595854	52.70871069	49.1951259	53.38352917
7.66	107.7117868	54.45437355	50.0317029	52.34460411
7.68	104.2860835	57.20961573	50.53069673	51.45606937
7.7	101.515675	60.79581353	50.88074831	50.4322166
7.72	99.72433209	64.81686925	51.16780665	49.42677217
7.74	99.22215998	68.65534533	51.50779452	48.85749115
7.76	99.58415816	73.21363131	51.83748711	48.53616341
7.78	100.413517	78.08076651	52.16614117	48.66774295
7.8	102.0058479	83.02282941	52.65601578	48.72989686
7.82	103.8580898	87.29475781	53.70951461	49.02917181
7.84	105.8127586	91.81162605	55.08673374	49.50956416
7.86	108.8477581	96.7328557	56.26942866	50.0539367

7.88	111.7340722	101.4897179	57.59934574	50.81813935
7.9	115.1302417	105.7411599	59.23669835	51.2738649
7.92	119.1715269	109.109189	60.42601476	51.82347457
7.94	122.8218121	112.3715269	61.12426636	52.25773182
7.96	125.7854545	115.6357266	62.03153605	52.59513298
7.98	128.2338477	119.0200617	62.81381434	52.36595207
8	129.509277	120.9324623	63.16606533	52.39021033
8.02	130.0161199	122.3828688	63.10352816	52.47750025
8.04	131.0115907	123.3756032	62.89084033	52.77956113
8.06	130.7976651	123.5230397	62.99258671	53.28427849
8.08	130.1572343	122.8083942	63.14301648	54.44102033
8.1	129.2976701	121.5858125	63.45331277	55.24444433
8.12	128.338825	119.1255536	64.12187987	55.76315907
8.14	126.7341127	116.2393528	64.62312468	56.3439458
8.16	125.0263151	113.3641834	65.37350389	56.82574679
8.18	123.5448984	110.1073253	66.54745374	57.02966326
8.2	122.0169957	106.1976934	67.96292851	57.46289008
8.22	120.8903782	102.5779108	68.93349479	57.65231267
8.24	119.0492365	98.75007685	69.5316392	57.21748711
8.26	117.9658631	95.04023258	70.01711093	56.65757306
8.28	116.9714703	91.17439478	70.49960967	55.90102235
8.3	115.4356285	86.98895945	70.61199717	55.2251896
8.32	113.8269906	82.46610679	70.21323592	54.58766003
8.34	113.0182051	77.66500455	69.42705127	54.34589342
8.36	112.7585833	72.84244008	68.8016038	54.19211447
8.38	112.604147	68.22863181	68.17630802	54.38895338
8.4	112.9670664	63.49859541	67.58713621	54.98919608
8.42	114.8574224	58.71011831	67.02658307	56.05005157
8.44	117.5105713	54.85953989	66.43286581	57.48657498
8.46	121.2975083	51.45025887	65.97992315	59.12490848
8.48	124.7924674	48.55224391	65.56143998	60.46381232
8.5	129.3432663	46.4305137	64.51834867	61.42484174
8.52	134.0578613	45.50281727	62.93906462	62.48716554
8.54	137.5361472	45.62003944	61.02798463	63.42713116
8.56	139.5758176	46.47802204	59.18292345	64.30533522
8.58	141.9007362	47.85985742	57.09173021	65.08866822
8.6	142.6390677	49.74095965	54.51040247	66.19101628
8.62	142.4359612	52.18247346	52.40188088	67.52464253
8.64	142.0778218	54.70254626	50.44921529	68.89232784
8.66	140.7341642	57.36183841	48.38410658	70.45058044
8.68	139.1184144	60.76821418	46.23193852	72.2735403
8.7	137.1617545	64.85019213	44.53564263	73.43255435
8.72	135.7426666	69.27264739	43.65038528	75.05001517
8.74	133.0896269	73.95720396	43.05515421	76.92167155
8.76	130.2709718	78.5141895	42.81195166	78.70126808
8.78	127.1616281	82.99154616	43.40168066	79.415766
8.8	123.9384073	87.22470118	44.46972495	80.00108707

8.82	120.2639236	91.98413186	45.86077258	80.29705531
8.84	116.3262837	95.61299322	47.76765093	80.15988472
8.86	112.6690565	98.35445242	50.0782071	79.82163414
8.88	108.5869886	100.6037051	52.61478714	79.79179593
8.9	105.0951957	102.8585843	55.03405299	79.67796036
8.92	102.0082314	103.9366023	58.10393569	79.38588634
8.94	99.54789362	104.3807099	61.23233795	79.21036
8.96	97.45204368	104.908376	64.50530893	79.01835474
8.98	95.71978562	105.057926	67.5945313	79.5306937
9	95.25231065	104.863515	70.61923046	80.2185944
9.02	96.05833755	103.9270907	73.69515623	81.33651835
9.04	97.34302558	103.3820558	77.03844271	82.22280413
9.06	99.80569218	102.6817909	80.07565578	83.07230054
9.08	102.8549681	101.4464425	82.60317929	83.89178077
9.1	107.0910132	100.5446355	84.36250784	85.28656487
9.12	110.7660239	99.82341389	85.86546971	86.58590454
9.14	114.7889908	99.13620993	86.90348367	87.52671049
9.16	118.4316432	98.35856103	87.20821418	88.24449692
9.18	122.4048104	97.71935484	86.69106583	88.81681869
9.2	124.5963313	97.52042573	85.79482253	89.3777389
9.22	126.0734655	97.2382971	84.49556477	89.87555971
9.24	127.9956184	97.26385479	82.78789564	90.44105471
9.26	129.5021084	97.74156538	80.7814056	91.40954394
9.28	130.6041774	99.19887754	78.38390434	92.02494185
9.3	131.8537243	100.3496896	75.98335625	92.47576398
9.32	133.1792841	102.2502124	73.41609162	93.14750126
9.34	133.6121539	105.2443088	70.43911922	93.78991506
9.36	134.987388	108.5849661	67.70682577	93.86565477
9.38	136.0800728	111.9641723	65.21134897	93.79302154
9.4	137.6184033	115.3539721	62.68661442	94.24684397
9.42	138.8480969	118.8646729	60.13649813	94.52220851
9.44	140.701257	122.5709506	57.79069471	94.26382647
9.46	142.6224654	126.2680069	55.87072707	93.71911012
9.48	144.5253383	129.6767418	54.14826676	93.18075842
9.5	147.1490009	132.5384356	52.27510264	92.07525533
9.52	149.2494064	134.6548478	50.49875518	90.70566387
9.54	151.3679169	137.457113	48.70512691	89.60042977
9.56	153.7880008	140.7702811	47.38196279	88.55037719
9.58	156.3765426	143.5898109	45.99964405	87.54879867
9.6	158.535678	145.8470118	44.69819294	86.36501669
9.62	160.3928921	147.4865709	43.22419557	85.3094954
9.64	162.4752533	149.206123	42.02114774	84.3671352
9.66	164.4538174	150.0751259	41.08214582	84.32121044
9.68	166.3638851	149.8726009	40.55517646	84.0450905
9.7	167.8282192	148.9706998	40.48699363	84.27381636
9.72	168.3461897	147.7216534	40.63197897	83.6956305
9.74	168.2242522	146.0685691	40.58590859	83.578829

9.76	166.3552119	143.5890141	40.16572656	83.75203256
9.78	163.4806189	140.3424704	39.8399727	84.5079644
9.8	159.2710153	136.4125604	40.27766407	85.51152897
9.82	155.4888533	132.3829791	40.82978865	87.15241379
9.84	150.3718091	128.5017514	41.99259986	89.07474365
9.86	144.2897199	124.8841319	43.25061381	91.33973203
9.88	137.8112438	121.4603003	44.85905552	93.94624128
9.9	131.6201931	117.7218232	46.84654667	97.44863485
9.92	125.3983365	115.149551	49.10120437	101.3577399
9.94	118.8975367	113.144503	51.55472343	105.9849398
9.96	112.8930185	111.7498493	54.18412782	110.3473283
9.98	107.1569724	110.408825	56.80772778	115.0415007
10	102.439101	110.2992679	59.81318334	119.5518212
10.02	98.90364648	111.0731702	62.9952887	123.646306
10.04	96.98259379	111.7738012	66.25262918	127.209639
10.06	95.33250076	113.0470219	69.46613914	130.4955789
10.08	94.12156841	114.9424472	72.41327435	133.2252523
10.1	93.79198807	117.8066599	75.40569522	134.9520144
10.12	93.55853474	121.1942552	78.70609566	135.9515826
10.14	94.12309334	125.0355648	82.38348872	136.3169107
10.16	95.45990697	129.2613702	85.4750541	135.5402265
10.18	97.37942967	133.7275164	87.60579229	133.9519901
10.2	99.4815229	138.0104854	89.34309131	131.9259652
10.22	103.0714147	142.5658873	90.92446456	129.5302134
10.24	107.6965446	146.8497007	92.26227222	126.795225
10.26	112.3624906	150.7093923	93.20500961	123.2241167
10.28	117.7893609	154.5273567	93.84529781	118.493962
10.3	123.4127273	157.6450642	94.57834968	113.9883365
10.32	128.791168	160.3111892	94.70564668	108.9158186
10.34	133.6676267	161.9335069	94.50772474	104.0058641
10.36	138.0622136	161.8828557	93.88810092	98.37178683
10.38	141.7142775	161.6256588	92.99164627	93.14631611
10.4	144.3009738	160.4100303	91.90674588	87.75754778
10.42	145.640087	158.9765527	90.71953383	82.86890383
10.44	145.2878774	156.3417595	89.89057943	77.93651734
10.46	144.5752948	152.3816847	89.34542926	73.90469006
10.48	143.2344393	148.7776661	88.90525736	70.43692183
10.5	141.4228446	144.5290565	88.02585802	67.32642431
10.52	138.531445	139.9418839	87.24138336	64.62847305
10.54	135.4902275	134.5126585	86.17716655	62.76838204
10.56	132.8158813	129.2060936	85.40436546	61.33478107
10.58	129.9621853	123.675493	84.74654768	60.22054808
10.6	126.8164203	119.2358378	84.33432299	59.66385479
10.62	124.0391132	115.0784195	83.84944383	59.25350693
10.64	120.9470118	111.3736445	83.24922035	58.76453332
10.66	117.8801749	108.1165315	83.0622429	58.61688138
10.68	114.6533805	105.3181606	83.41017798	58.70751947

10.7	111.8535585	102.8482516	84.20166953	59.24543634
10.72	109.1506553	100.4684508	85.12286581	60.2451077
10.74	106.5511305	99.2588472	86.6237385	61.44392052
10.76	104.0740924	98.74873192	87.79413085	62.79208616
10.78	102.0279442	99.14781272	89.43668116	64.3352432
10.8	100.6546395	100.0211467	91.34024168	66.25126504
10.82	100.2241855	101.7432582	92.91908889	68.03654363
10.84	99.97556072	104.0358418	93.67336434	69.65654869
10.86	99.8651168	106.3908858	94.50456062	71.83382142
10.88	101.1626737	108.9809455	95.42867631	74.04564668
10.9	102.5809708	111.4477308	96.55429973	76.3537476
10.92	103.9546547	114.6849408	97.1935676	78.26143493
10.94	105.3474588	117.9304864	97.85202649	79.789189
10.96	106.2756275	120.4880362	98.25436445	81.58672363
10.98	106.0458722	122.5066812	98.76908889	84.01220042
11	105.524236	124.1133107	98.78557589	86.07957731
11.02	104.639911	125.2067206	98.68004652	88.40505612
11.04	103.2985287	125.5837891	98.09057235	90.25319951
11.06	101.7862746	126.235852	97.20755284	92.25694509
11.08	99.60001011	126.4634149	96.24458894	93.4809546
11.1	97.23818789	124.972706	94.75586308	94.36326322
11.12	95.3704864	123.0522469	92.83123774	95.0577025
11.14	94.19415007	120.6454343	90.24414501	95.57138841
11.16	93.89691475	118.5690312	87.49638892	95.78251896
11.18	94.11671049	115.9044433	84.26780261	95.28914754
11.2	95.48949843	113.4864	81.37474972	94.58579937
11.22	97.52178481	111.3355799	78.62103448	93.54133077
11.24	100.4426808	109.8015067	76.21718981	92.46455759
11.26	104.2068551	108.2064041	74.17327738	91.49265446
11.28	107.7804176	107.5609101	72.38942967	90.13307008
11.3	112.563876	106.530364	71.12832238	88.25807867
11.32	117.033966	105.2586783	70.72923046	86.56769137
11.34	122.0715168	104.2225048	71.0355223	84.69890788
11.36	127.3942148	103.2982657	71.45503994	82.75494287
11.38	133.4139084	102.809279	72.54464253	80.65418849
11.4	140.1606745	102.288743	73.2598918	78.16206795
11.42	146.1155324	102.6837891	73.40217616	75.51859339
11.44	151.7079502	103.2423046	73.32644656	72.93236728
11.46	157.5767722	104.3312013	73.67419759	70.93458085
11.48	163.1448407	105.8992669	73.94684093	68.30989382
11.5	166.9117939	108.2713763	74.48765497	65.98306098
11.52	169.5005451	110.8722186	75.05272727	64.26131661
11.54	170.7420922	113.2516564	76.08016786	63.52549499
11.56	170.6177976	115.9385964	76.97530792	63.1909192
11.58	169.0120326	118.7994681	77.93242289	63.41736273
11.6	166.750272	122.8504237	78.29701183	64.26166144
11.62	163.1865689	126.4553969	78.76871777	66.12001618

11.64	158.2523299	130.5722672	79.65367782	68.41115077
11.66	153.1739306	134.8384043	80.54777834	71.40574679
11.68	148.1432238	138.8278926	81.08184245	74.81921023
11.7	142.9404844	142.9620851	80.77908686	78.55038427
11.72	138.3542229	147.0867428	80.26056831	82.62474669
11.74	134.1286359	151.0783113	79.87486399	87.06629791
11.76	130.3322945	154.8379502	79.72467792	91.5393781
11.78	127.4285752	158.9827809	79.43553039	96.25443928
11.8	125.2683557	164.0265143	79.72056629	100.7974396
11.82	123.6010173	169.0288826	80.28363737	105.3075619
11.84	123.1199869	173.3855152	81.05348771	109.6971595
11.86	123.9988037	177.3253918	81.81013753	113.2487461
11.88	125.2627101	180.2116432	83.04334007	116.5431267
11.9	127.0911932	182.0772485	84.7462797	119.1778107
11.92	129.1116089	183.6687886	86.69573668	121.4055749
11.94	131.7227495	184.4287724	88.22611285	122.0483052
11.96	133.3949105	185.0403024	89.85414905	121.441445
11.98	135.1906957	184.6695015	91.52290424	119.9774446
12	136.3025867	183.6419739	92.28737789	117.5342067
12.02	137.0482293	183.0457114	92.31842856	114.1482273
12.04	138.8866225	181.8452351	91.91573061	109.9706239
12.06	140.5070179	180.1078309	91.19325614	105.1900404
12.08	141.1528678	178.2658954	89.8162797	99.69763576
12.1	141.0047295	176.1792345	88.4982435	94.24833856
12.12	141.2150035	173.4183638	87.36551522	88.66537668
12.14	141.1650571	170.8495712	86.55261402	83.2040267
12.16	140.1834291	168.3036839	85.74767115	77.35269289
12.18	138.7195965	166.2441207	84.90304985	72.75138032
12.2	137.6335878	164.4013105	83.47964	68.98074932
12.22	136.9086541	163.0112812	82.3502164	66.12426737
12.24	136.9428951	161.7762625	81.21599454	63.60078269
12.26	138.4355516	160.537842	79.65978865	61.80463444
12.28	139.9580352	160.0175276	77.96018	60.83458995
12.3	141.4140833	159.589643	76.56492264	60.1976489
12.32	143.8509789	159.4453969	76.11734756	60.30580342
12.34	147.2595237	160.0363616	75.79151684	61.0041895
12.36	151.2870341	161.5791263	75.71071494	62.27202043
12.38	155.9282465	163.8440125	75.41385782	64.28007888
12.4	160.7043685	165.7271494	76.16186571	67.26776115
12.42	165.0545667	167.385672	77.21092325	70.57223885
12.44	169.3136839	169.0852199	78.48163616	74.58896451
12.46	173.4716635	170.7392952	79.94996966	79.31731924
12.48	176.557747	171.3945404	81.94422793	84.4225493
12.5	179.5259126	172.0205026	84.57575488	88.76410658
12.52	181.9974113	172.0550925	87.32059763	92.99580038
12.54	183.6850521	171.5826494	90.3865497	96.4187117
12.56	183.4453878	171.6672839	93.72389827	99.89905248

12.58	183.3610891	171.4335332	97.35237031	103.1851006
12.6	182.7863808	171.2778016	100.2066893	105.7501598
12.62	181.846843	170.7747153	102.8708272	107.4635211
12.64	180.07027	170.1280534	105.6778542	109.2719982
12.66	177.4709313	168.3177055	108.3075427	110.4763576
12.68	174.8962372	166.3968217	110.5348751	111.3324077
12.7	172.3107291	163.9522732	113.1800071	112.1034584
12.72	169.9492183	161.5404267	115.52054	112.6934776
12.74	166.4841571	158.766302	117.8860754	113.1182759
12.76	162.9808211	156.0318859	119.917293	113.5122378
12.78	160.0291506	152.543962	121.3180625	114.1546547
12.8	157.3736374	148.9116068	122.0971848	114.5497421
12.82	154.6843594	145.5367489	122.720364	114.8004773
12.84	151.792705	141.768104	122.6374376	114.922251
12.86	148.9821094	137.7312731	121.7136394	115.7014076
12.88	146.34369	133.5597755	120.513877	116.1367772
12.9	144.0390727	129.0799929	119.408827	116.2039114
12.92	142.359277	124.4444848	117.7563009	116.2760957
12.94	140.3728122	120.3875447	114.9657063	116.3919132
12.96	136.8294691	117.5019254	112.0341571	116.4340237
12.98	132.780447	114.1355425	108.6367975	116.7852452
13	128.5825068	110.8801557	105.9873445	117.4026727
13.02	123.0713692	108.5499191	102.6085034	117.6557357
13.04	116.6806492	106.3451926	98.98869046	118.4464769
13.06	109.0684832	104.1643624	95.22780969	119.3205481
13.08	101.2225554	102.680003	91.93637274	119.8952199
13.1	93.61948023	101.7462089	88.38858226	119.4052058
13.12	85.38687835	101.3136869	84.6688017	118.8443159
13.14	77.35139246	101.981893	81.8944504	117.9697543
13.16	69.16692588	103.5553251	79.14864193	116.3617798
13.18	61.87801193	105.7638518	76.89813328	114.0594772
13.2	54.97364344	108.6230893	74.2821175	111.7564648
13.22	49.27245626	112.1484346	72.34340985	109.5335666
13.24	45.3676671	116.7924644	70.84212357	107.6760309
13.26	43.51375468	121.0065649	69.80949944	104.9342664
13.28	43.33393973	126.4120993	68.85361917	101.9326393
13.3	44.18810092	132.0957751	69.03022854	98.90688644
13.32	46.44092628	138.1493063	69.63387097	96.15841339
13.34	50.21626049	143.8543715	70.95683992	92.70343816
13.36	55.96785418	150.1596046	72.24543735	89.01295985
13.38	63.28636364	156.176398	73.80093639	85.42673981
13.4	71.96849732	162.5307938	75.28817474	81.98809081
13.42	83.02556881	167.4142987	77.25087269	78.82924967
13.44	94.70592173	171.5353231	79.66641015	76.07617555
13.46	107.8105511	174.4817787	81.98914956	73.45654161
13.48	121.5777591	177.1929285	84.73480028	70.65457579
13.5	134.9803448	178.7038133	87.10118819	68.62024775

13.52	148.033061	179.1515077	89.22284154	67.2623693
13.54	160.2974841	179.6089261	91.35318232	66.96688644
13.56	171.7412479	180.5768925	93.77540297	66.63553848
13.58	182.3292456	179.780628	96.00422389	67.09636667
13.6	191.5833643	178.9625362	97.74661846	68.25917889
13.62	197.7743028	177.6061887	98.60966933	70.01999596
13.64	202.0492224	174.6856366	99.40697138	71.81296896
13.66	204.6837779	170.479908	99.57710992	74.14372737
13.68	205.7363252	165.9422753	99.97390737	76.4216483
13.7	204.8532036	161.3802154	99.33740216	77.87014865
13.72	202.22676	157.4670078	98.62574376	79.76648397
13.74	199.1892557	154.9398898	97.71821418	81.58720902
13.76	195.7668642	153.7314137	95.97406512	83.08698048
13.78	191.3009435	153.8965376	93.72992416	84.99679138
13.8	186.7498665	155.4583113	91.48757104	88.25056426
13.82	182.6197917	158.8248326	89.83669936	91.85723936
13.84	178.9961735	163.6157033	87.82058752	95.52156436
13.86	176.2650238	170.459637	86.62164425	99.24772474
13.88	175.1991394	180.0534988	85.67980281	103.183155
13.9	176.0132733	191.2884377	85.57700576	107.4787056
13.92	178.3515482	204.2477328	85.8946577	111.5851542
13.94	182.754504	218.0843877	86.78773688	114.8841976
13.96	189.3854384	232.7330134	87.96480231	118.8068935
13.98	198.0841986	248.0511447	89.88459804	122.6644848
14	208.5963889	263.1898352	91.65297098	126.5011801
14.02	220.8514592	277.8544797	93.80928203	129.9238073
14.04	233.1061705	292.58658	95.91771463	133.5511316
14.06	246.9624421	306.8575447	97.93706138	137.4365082
14.08	261.5390727	319.6877086	100.1090019	141.754776
14.1	277.0003246	330.3110739	102.4215381	146.208292
14.12	291.2412479	339.9672899	105.0850521	150.5088877
14.14	304.9646102	347.7398817	107.5544726	154.5923096
14.16	315.821259	352.9749034	109.9859045	157.7998503
14.18	324.7956517	354.3427697	111.9472828	160.9675609
14.2	331.9602306	353.2571959	113.90072	163.7349135
14.22	335.6880382	349.1643826	115.6412691	165.6562453
14.24	336.3082779	341.5040186	116.794869	165.6943402
14.26	333.8128941	331.1661806	117.1711437	165.0685792
14.28	328.0370786	319.4716928	116.9330499	162.8758621
14.3	319.5815714	305.5625038	115.5781737	159.1932561
14.32	309.1833502	290.1382	113.6624573	154.103607
14.34	296.2430852	274.7299242	111.2785256	147.9992497
14.36	281.4204368	258.9665902	108.9763434	141.0804045
14.38	265.2756356	243.9715927	106.1791132	133.6385681
14.4	248.7335767	230.1834078	103.2957195	126.388563
14.42	232.8085792	217.487388	100.0248984	118.0363616
14.44	216.9778279	205.7565224	96.06107291	109.6890434

14.46	201.5302902	195.4186621	92.57608858	101.4467287
14.48	187.6357862	186.371625	89.15964102	93.20281323
14.5	174.1043624	178.4598008	85.79396703	84.42588836
14.52	161.7468561	171.7430165	82.4921175	75.66307716
14.54	151.530087	166.8220184	79.27984629	67.3673243
14.56	143.2404237	163.6367995	75.54465568	59.82770452
14.58	136.6673203	161.9574547	71.77664273	52.8807564
14.6	132.4774406	160.8753524	67.85973	47.00400546
14.62	130.4542087	160.9892244	64.26011225	42.22278896
14.64	130.2803792	162.0565254	60.62985438	39.37384872
14.66	131.324143	164.2394074	57.78467691	37.88719284
14.68	133.1932096	165.2716695	55.30442107	37.86325715
14.7	136.0909273	167.4107786	53.48190009	39.38927697
14.72	138.4973486	169.4798766	51.70927799	42.42837597
14.74	142.1858904	170.3561523	50.36631712	46.90278491
14.76	145.7162443	170.0542037	49.51939225	52.73079786
14.78	149.3476186	169.1841359	49.10337243	59.18091617
14.8	151.4103024	168.4123926	49.39313682	66.0833067
14.82	151.8977106	166.5062989	49.70589139	72.96596016
14.84	151.8061917	163.4276752	50.13330974	79.17346243
14.86	151.7223076	160.0782587	50.9002073	85.85427141
14.88	149.6784336	156.7005916	52.005315	91.80319142
14.9	146.3967975	153.1721944	53.4607301	96.51677419
14.92	142.7899676	150.5392588	55.55984731	100.1057195
14.94	138.5959723	149.5463262	57.95603499	103.5686045
14.96	134.7622136	148.2484275	60.2211174	105.689553
14.98	131.4324563	147.2123683	61.8575043	106.7911255
15	128.1017504	146.5685459	63.55104561	106.6304186
15.02	124.7533148	145.6078785	65.11513095	105.5111043
15.04	121.285221	144.2244939	66.61340479	104.3329639
15.06	118.8367267	142.8768207	67.59922945	101.9946526
15.08	117.318736	142.1984104	68.21050763	98.63885327
15.1	115.1888826	141.6443655	68.22004753	94.12283952
15.12	113.4119678	141.0384073	67.55863181	89.82588634
15.14	111.5445647	140.411257	66.79861058	84.94163111
15.16	110.0372646	140.1706674	65.37929821	80.24392861
15.18	108.8270553	139.5968409	63.74860249	75.9412974
15.2	108.5687825	138.9312559	62.07601274	72.10778441
15.22	108.131894	139.0471726	60.35859844	69.06904338
15.24	108.1794752	138.7059591	58.84174436	66.78693093
15.26	107.93748	137.9978451	58.09419658	64.97280311
15.28	108.7150774	136.349282	57.95340682	64.08933967
15.3	109.1614582	135.0219729	58.11448984	64.30672768
15.32	109.0976196	132.3382486	58.20973708	65.70706239
15.34	109.2125412	129.5050177	59.22501466	67.90544241
15.36	108.9815725	126.7832076	60.27528769	70.66566893
15.38	107.9199333	125.4185873	61.1572707	73.94777328

15.4	106.4020568	124.4845819	62.01648296	78.20735363
15.42	105.1956345	124.078825	63.25313277	82.50006674
15.44	104.0426312	125.5908201	64.94618768	86.60405198
15.46	102.6001891	128.3073809	66.9891708	90.43173728
15.48	101.5443907	132.5768945	69.05376985	93.86218323
15.5	100.8785004	137.8815694	71.0046122	96.85624128
15.52	100.9484761	143.1962655	73.4685944	99.20866316
15.54	100.5565861	149.1320326	75.68081302	101.326212
15.56	100.6681899	154.7525038	78.02634543	102.1135585
15.58	101.9038649	160.3917525	80.62518758	102.6649469
15.6	103.2369148	166.6243473	82.9696754	102.9354596
15.62	104.9033016	172.1528527	84.43972394	103.188647
15.64	108.111348	176.9349772	85.69661846	102.6205198
15.66	111.5436212	181.8520659	86.47348165	101.6806624
15.68	114.7711548	186.6240196	87.45568814	100.3348013
15.7	117.985768	190.2044868	88.65550915	99.0365497
15.72	121.3747305	193.1434129	89.67856204	97.99557589
15.74	125.7119618	195.3044544	90.94301851	97.07137931
15.76	129.8531469	196.9533229	92.3957842	96.67884316
15.78	133.6325948	196.4113844	93.60617959	96.21439579
15.8	137.8887916	194.7023208	95.15269997	95.90848923
15.82	142.1295723	191.8766407	97.00591668	95.50742947
15.84	146.6994792	187.3872778	99.22371221	95.56734554
15.86	150.0294317	181.2516736	102.1783588	95.95494489
15.88	152.8712974	174.2062797	105.5691465	96.32805339
15.9	154.3562746	166.3332592	108.9296491	96.85744464
15.92	156.5036445	158.2820356	112.550995	97.46061988
15.94	157.6459238	150.390541	116.8179604	97.9629548
15.96	158.3693265	142.9837567	120.4226899	98.37706947
15.98	158.3354657	135.3708545	123.4783729	98.96041258
16	157.9092851	128.2005946	126.3698412	99.08153201
16.02	157.7085266	123.0082273	129.5078067	97.97939124
16.04	157.0417211	118.9071039	132.0428961	96.7661715
16.06	156.7848468	115.5752513	133.8791506	96.06266761
16.08	156.648741	113.2202144	135.3001224	95.32471837
16.1	155.358743	111.6178471	136.5043928	93.0742886
16.12	154.1688614	110.4019891	137.5237456	90.10327738
16.14	152.4765082	109.9688159	137.9764031	86.98982708
16.16	151.1023127	109.994411	137.5378046	83.9682253
16.18	148.9659844	110.0867166	136.6256244	81.3354505
16.2	147.1715866	110.4604156	134.872068	78.2523602
16.22	145.7887026	110.7324623	132.6662514	75.09716756
16.24	145.0388118	111.1121671	130.6764243	72.09025382
16.26	143.360003	111.8765295	127.8694175	70.28391344
16.28	142.1024917	113.2022085	124.3309374	69.03640914
16.3	141.1291314	114.4624957	120.6092365	68.34099707
16.32	139.8341248	116.1323905	116.4938558	68.41315199

16.34	138.3161705	117.8292082	112.4461523	68.96664172
16.36	136.2300506	119.2322439	108.6319931	69.58913237
16.38	134.4078613	120.3859511	103.8615067	70.72251997
16.4	133.0680655	121.5976074	98.96621296	72.39163313
16.42	132.0006573	122.8287795	94.33842957	74.33773182
16.44	130.717301	124.7798948	89.50895642	76.31649712
16.46	129.3031338	126.761083	84.87242997	78.16033168
16.48	128.436397	129.7117282	80.64819395	79.98620791
16.5	127.8207008	132.6417454	76.93396906	82.37151886
16.52	126.2932693	135.8311376	74.25975427	85.78771665
16.54	123.6316139	139.4350844	72.02072303	89.17915765
16.56	121.9629255	143.3483659	69.45478916	92.10294367
16.58	120.2718829	147.1478744	67.12702397	95.17402569
16.6	118.7882657	152.1215148	65.64683487	98.0238467
16.62	117.48766	157.1703034	64.95484882	100.9923794
16.64	116.8183578	161.5902083	63.97356558	103.9454586
16.66	117.3644029	165.6072424	63.74000809	107.0245384
16.68	118.5615472	168.7310314	64.15778946	108.7211852
16.7	120.3981869	171.2767489	64.8650268	109.8711073
16.72	122.6690161	172.101531	66.07080089	111.512524
16.74	124.5797887	171.9952361	68.05886844	113.10405
16.76	125.7382041	171.4547143	70.288559	114.2002447
16.78	126.547028	170.2390242	73.29247548	113.9622065
16.8	128.2339549	167.9235858	76.4024411	113.3411801
16.82	128.9864577	164.8828537	79.71188593	113.0723066
16.84	129.966667	161.9311113	83.03090606	112.8442461
16.86	130.495858	159.0738427	86.31893821	112.812617
16.88	131.1287764	156.361623	89.63409546	112.1935919
16.9	131.4161988	152.4149004	93.72806452	111.1552028
16.92	131.5984771	148.4090252	97.84048438	110.3755122
16.94	131.7459076	144.3419223	101.5153261	109.9991253
16.96	133.0152513	141.2992072	105.2568723	109.3564819
16.98	134.1181414	138.2060977	108.4738578	108.6944261
17	135.3073425	135.2052796	111.8082981	107.4860886
17.02	136.8231146	133.7175447	115.0001911	105.96892
17.04	138.0878835	133.7124097	117.6244575	104.3320862
17.06	139.3477227	134.3298645	119.39775	103.0357903
17.08	139.947117	135.8874436	121.6392962	102.0785044
17.1	140.0591485	138.1651997	123.5773213	101.7260896
17.12	139.5479593	141.5641612	125.3824684	101.622616
17.14	139.6086733	145.9896198	126.4722651	101.7166286
17.16	139.6549419	150.7218364	126.5767034	102.0120953
17.18	138.983787	155.2889048	126.67351	102.7946617
17.2	137.6369137	159.7674113	126.2552887	104.3277601
17.22	136.744146	163.5565143	124.8582617	105.4840227
17.24	136.167842	167.1635191	122.683336	106.7371746
17.26	135.9788088	170.2776894	121.2267914	108.7349004

17.28	136.0657731	173.2463475	119.8241389	111.06847
17.3	136.0940075	175.9804338	118.5120002	113.8202589
17.32	136.0922783	177.3890181	117.0930802	116.3017959
17.34	135.5218526	179.1548043	115.888922	118.0359096
17.36	135.4167712	179.7017514	114.3201031	118.9188796
17.38	135.8832339	179.5341501	112.6331854	119.029373
17.4	137.0512711	178.8495773	111.4615219	118.9462827
17.42	138.7401658	178.2832834	111.0246415	118.6401395
17.44	140.4153413	178.5318253	110.6968086	118.3847002
17.46	142.566936	178.613872	110.7201588	117.5731378
17.48	145.086128	178.8646304	110.7136991	117.0361664
17.5	147.756758	178.7937183	111.7645333	116.498736
17.52	151.7394448	180.4728031	112.9494469	116.0569067
17.54	157.0723733	182.4084407	114.5775255	116.0769592
17.56	164.7938801	184.6549995	117.1174153	115.0336202
17.58	172.952343	185.7310588	119.8823885	113.7459945
17.6	181.5238912	187.707657	122.6391374	112.9536707
17.62	190.9273294	190.4623056	125.1378178	112.5897553
17.64	201.0473991	193.9227869	127.8140853	112.38847
17.66	211.2715532	197.1790525	129.4815603	113.8176914
17.68	221.2713925	201.389546	131.6186652	115.3621124
17.7	232.3517767	205.8918809	132.8656922	117.8269501
17.72	242.8668733	210.2125351	134.0370634	120.6176297
17.74	252.1946395	214.4706148	134.1725392	124.2573081
17.76	259.7187673	218.1783264	133.905225	128.2975235
17.78	267.048469	220.9787754	133.2069198	133.0265709
17.8	272.9781596	223.9552857	131.7202053	138.3540398
17.82	278.0921307	226.8050693	130.0681333	144.1101213
17.84	281.5198635	228.1779644	128.2284417	150.6969057
17.86	283.9608161	227.9549186	127.0594934	158.5486035
17.88	284.9584457	226.355676	125.5300162	166.6818172
17.9	285.3964637	223.208016	124.2445262	173.8901851
17.92	285.2516766	218.4040702	123.2646769	180.5512822
17.94	284.2620336	212.8237658	123.1197078	186.4661199
17.96	282.152973	206.6551411	123.2474821	191.8261493
17.98	279.061084	200.9564142	124.2750359	196.0296754
18	275.1610092	194.8599292	125.7850895	199.7993973
18.02	270.6992669	188.8988654	127.3980918	202.2514198
18.04	265.8393124	182.6769957	128.4725594	203.818653
18.06	260.9632915	176.3665709	129.963871	203.7521094
18.08	255.3172667	170.7142997	131.8747062	203.2456851
18.1	249.1190666	165.3632015	134.558467	201.2040024
18.12	242.4583497	161.4892679	137.4842118	198.6603408
18.14	236.7083426	157.7960896	140.0896724	194.833872
18.16	231.2542694	154.642615	142.4833795	189.8105663
18.18	225.4022014	151.7469491	144.601444	183.3713581
18.2	220.2969532	150.0994398	145.8366185	176.5259015

18.22	216.3674012	148.9633896	146.8631368	169.3814875
18.24	212.1101102	148.4371767	147.2304803	161.214508
18.26	207.1035696	148.2096805	146.6849358	153.3138962
18.28	202.1184215	149.0441602	145.9644403	144.5142107
18.3	197.9403195	149.7153241	144.633157	136.6018829
18.32	193.4983477	151.1546941	143.1927495	129.2747639
18.34	188.8621984	153.3373091	140.4301891	122.8742492
18.36	184.4005926	156.3926565	138.3926696	116.2469673
18.38	180.3236404	159.113785	135.5986662	110.5787228
18.4	174.620725	162.5749024	132.8821559	106.1097138
18.42	168.3099353	165.640092	130.2907857	103.1448013
18.44	161.8459844	167.0046668	127.0809607	100.9754889
18.46	156.584236	168.3895328	124.1590221	100.9617787
18.48	151.989816	169.8423309	121.3157387	100.9036758
18.5	148.3804985	170.6177298	119.287654	101.6059389
18.52	145.4612246	169.926485	117.2234129	103.6281191
18.54	142.9766326	168.5966346	116.0578936	105.9564991
18.56	141.1558105	167.6195035	115.5705572	108.2440196
18.58	140.724053	166.0227485	115.9663606	110.2968875
18.6	140.4577652	163.5433006	116.5966094	112.7143786
18.62	141.1963202	161.8580463	117.5699504	115.0722399
18.64	142.3230418	160.0744797	119.1446779	118.4788007
18.66	143.3403125	159.2053261	121.4492598	122.1749044
18.68	144.2413601	158.26333	124.2655132	125.5188472
18.7	144.8159976	157.3040965	127.7551431	128.4519567
18.72	145.5320953	156.4360198	131.2323804	131.2994489
18.74	147.3099727	155.0378481	134.8050207	133.0369764
18.76	149.050541	153.4689706	138.890723	134.4231318
18.78	151.4164445	152.5760097	143.3426636	134.5418859
18.8	154.1338275	151.5063485	147.6855789	134.8517221
18.82	156.2990757	150.1841582	151.8190879	134.5440924
18.84	157.6040671	147.7181323	156.8724603	132.6802053
18.86	158.7670897	144.9167378	161.4987855	130.857657
18.88	160.3805228	141.6652028	165.9133896	129.5315361
18.9	162.3988452	138.6287774	170.3062939	128.0897249
18.92	163.7371827	135.431802	174.5343493	126.1386015
18.94	164.5321842	132.1421226	177.9286025	125.4047103
18.96	164.7331186	128.8602457	181.4634412	125.3359369
18.98	164.5355405	125.3040641	184.0262484	126.9994954
19	163.9377753	122.3365103	185.9543017	129.2227677
19.02	163.1431955	118.7567024	186.8008241	131.9587977
19.04	162.2794428	115.1860643	186.0749803	135.4660744
19.06	161.6191516	111.282255	184.4508363	139.9316675
19.08	160.9405592	107.7282931	181.8007564	144.9477187
19.1	158.8223895	104.3304439	177.9845323	150.684686
19.12	157.0679169	101.7477136	172.9499262	156.5724846
19.14	154.8825827	100.3361341	168.6971797	163.0792618

19.16	152.979818	100.7319365	164.0212913	169.8703822
19.18	150.7110223	101.4477945	158.6135282	178.1259268
19.2	147.4889827	102.7780119	152.4516978	187.3115219
19.22	144.1031904	106.0869532	146.2665891	196.1234412
19.24	140.751259	109.5076459	140.4269916	205.1977106
19.26	137.0166003	112.9255405	134.5709071	213.6113702
19.28	132.4874295	116.5205501	129.3863141	221.4281424
19.3	128.0270634	121.3902063	125.2390646	228.7119244
19.32	122.5253686	127.3185833	121.5043928	235.4365922
19.34	117.1378602	133.8916908	118.7509445	240.8467671
19.36	112.5274376	140.1889969	117.3221802	245.1472383
19.38	108.6393599	147.2793478	116.8426342	249.2922136
19.4	106.465854	153.9313732	117.1096835	251.9352381
19.42	104.5874446	160.4462029	118.9045192	252.5640995
19.44	104.2493953	165.9454717	121.8418455	252.0826555
19.46	106.0641369	172.4819567	124.874504	251.2404318
19.48	110.1573435	177.383064	129.8503782	250.3207817
19.5	116.8716776	182.1959622	136.7753484	249.1503276
19.52	126.4108909	184.9191394	144.5548407	248.6577136
19.54	138.4779523	187.7154313	152.4157245	250.0879927
19.56	152.8023491	190.2102043	161.2959602	251.5779209
19.58	169.2124967	193.1909859	170.5370573	253.0313196
19.6	186.1586419	194.6919881	180.3290039	255.560092
19.62	204.0460047	196.2349793	190.4840409	259.7547598
19.64	222.8365194	198.0413085	201.5779695	265.1330195
19.66	243.1967681	200.2498928	212.4378056	271.5421792
19.68	264.2094802	203.8747052	224.1045353	278.9858267
19.7	284.7684356	208.1467924	235.8355051	286.6513085
19.72	306.7313874	214.1123885	248.180359	295.9435706
19.74	328.7274032	221.3981596	262.0918273	307.5510325
19.76	349.4465254	231.4032501	275.6018475	320.2936859
19.78	368.0800728	242.4209131	289.9229042	333.9856902
19.8	386.500905	254.8873314	305.3153757	348.5644838
19.82	403.9913823	268.374864	321.9667449	364.0152442
19.84	421.6867125	282.4960198	338.4853504	381.8712661
19.86	438.0154667	296.9917939	355.4506411	400.3592396
19.88	452.2233441	311.3898493	373.9597138	419.9692679
19.9	465.2780868	326.6172626	393.1769471	439.0714572
19.92	475.7867034	340.3466053	412.3407281	458.304058
19.94	484.7498999	352.7275215	431.7449196	477.2947143
19.96	492.0792648	364.2335878	452.1838598	495.5507837
19.98	498.1351542	376.3518394	472.7403367	514.0278785
20	503.0084518	386.899282	493.0654303	530.6727637
20.02	507.6354161	394.3820669	513.9331287	546.6865406
20.04	512.5395399	400.1413318	535.1713864	562.7487299
20.06	517.2682031	406.0040338	556.4977601	579.2034877
20.08	522.4052402	408.6083001	577.7421721	594.5405086

20.1	528.3624603	410.0573172	597.4164597	608.6998534
20.12	534.9874598	409.8005228	614.2630549	623.4804551
20.14	541.3931641	409.0266478	629.9234604	637.5915452
20.16	548.6042815	405.9176509	645.6497634	650.2859693
20.18	555.4722793	402.6696703	660.4631004	661.4290434
20.2	561.4813935	398.6037436	673.1315826	671.7194054
20.22	567.3006442	396.6513409	683.8814319	680.0994903
20.24	572.9497836	394.8745171	691.8585438	685.9774719
20.26	578.8748943	393.5612013	696.4494762	689.2422277
20.28	585.4475174	393.2145111	698.7676388	691.6115603
20.3	592.9974709	396.2490191	697.727744	692.4487795
20.32	602.5496339	401.7886075	694.7556578	692.3732794
20.34	613.1403206	409.9350268	689.9733279	690.5581454
20.36	622.5842401	420.3134816	683.4547578	686.5910547
20.38	632.6057963	431.5310203	675.2897543	681.8952847
20.4	643.3253969	443.9139822	666.2088573	677.6044726
20.42	652.6225382	456.9009162	656.1070796	672.5693447
20.44	662.5837719	472.0607685	644.543514	666.8740307
20.46	671.5284154	486.0142674	633.2093548	659.9507544
20.48	680.3019678	498.8777369	621.6787987	653.4041703
20.5	689.1383527	512.0203883	609.5771918	646.7703671
20.52	696.8502831	523.3052189	596.403151	640.9081363
20.54	702.539278	533.091804	583.9204733	634.6465072
20.56	706.0482668	541.1311184	572.5348064	628.3129346
20.58	707.2830397	547.8023905	561.7650723	622.4053797
20.6	705.6851077	550.7981737	551.5980868	617.1218414
20.62	702.9432774	550.7922945	543.5488108	612.8187592
20.64	696.7246708	549.9923713	537.3395257	609.0909748
20.66	687.6746415	547.5568521	531.0764627	606.8727586
20.68	676.5766822	540.6913389	526.7794772	603.8880564
20.7	663.8191051	531.1236121	523.3354748	602.3147689
20.72	649.0956679	520.1804894	521.6477733	602.3186298
20.74	633.0606836	507.7750915	521.1992234	601.0965548
20.76	616.3196066	493.541258	521.8820407	598.1609718
20.78	597.1526737	479.9196218	521.8766973	594.2677551
20.8	575.6634998	465.075221	521.4548438	589.9959217
20.82	553.6852948	449.72568	521.7676307	583.5253292
20.84	532.0409465	434.1009839	521.9557316	575.5298888
20.86	511.2743756	418.8776964	522.1871585	565.4256517
20.88	492.3886611	404.3140409	521.251079	554.7785924
20.9	474.4612205	390.857927	519.5586925	541.3919911
20.92	458.6190687	376.7786035	517.4888583	525.8606259
20.94	443.6240237	364.2041956	514.0230731	507.9804925
20.96	429.4360704	353.107834	510.0756204	489.2773112
20.98	416.6947042	342.6587046	504.7533987	469.2522955
21	404.9591748	332.4033532	499.5567449	447.93108
21.02	394.3117868	323.5197806	493.1932774	425.5052523

21.04	385.4465062	315.2676974	485.4567449	402.7365153
21.06	377.6123612	306.0516999	477.4756851	380.6889675
21.08	371.0654748	297.4359106	468.5032895	359.0858691
21.1	365.5020498	289.552158	457.9836546	336.9166316
21.12	360.501984	282.2896602	445.5566185	314.7971797
21.14	353.9756831	273.9831328	432.9251603	292.5405481
21.16	347.4999949	265.9993558	418.9187532	271.6749176
21.18	341.2125554	258.7687744	403.8730873	251.8729295
21.2	333.769099	250.2339711	388.0117626	233.8769896
21.22	325.6955193	242.2072576	372.7833006	217.6796734
21.24	316.8454657	235.3632511	357.6539509	203.4174032
21.26	306.8921954	228.1559268	341.8923784	191.5175629
21.28	296.8285297	220.9674972	326.3643169	180.7753585
21.3	286.1168783	214.1235191	310.444418	171.8723996
21.32	274.1151431	208.4068976	294.3141804	164.2524057
21.34	262.2792021	202.9086793	277.9681302	157.5853635
21.36	250.2451421	196.7387572	263.3910992	151.973877
21.38	237.7426878	191.3697492	248.1901972	148.0215047
21.4	225.8608201	186.2739923	233.9432733	145.366302
21.42	215.9292598	182.4053089	219.9982678	142.4364951
21.44	206.4381747	178.7868773	206.8056618	140.4815725
21.46	197.5288148	174.3366599	193.9911144	138.8377369
21.48	189.7130903	169.2448428	181.3677278	137.787655
21.5	182.7493306	164.3538305	169.8972788	136.3070482
21.52	177.55559	159.6954768	159.2392487	134.5592871
21.54	173.2949924	154.7627505	149.3364627	132.7229791
21.56	169.4114804	149.9452624	140.9423572	131.2663394
21.58	165.1436768	144.4462362	132.8497219	128.6506947
21.6	161.213424	138.5076489	125.7157144	126.6195854
21.62	156.9051562	132.6870857	118.5944292	124.0314309
21.64	152.9340125	125.8611204	112.491626	121.4624866
21.66	149.5720386	118.6171433	106.867031	118.6649206
21.68	147.104592	111.2691627	101.7634998	115.4364445
21.7	146.3295288	104.6921458	96.7088563	112.416393
21.72	145.6799879	98.27776216	92.78141369	110.0321044
21.74	144.6935828	91.56250986	89.99571241	107.8295439
21.76	145.0016139	85.88138336	86.84468298	105.4045697
21.78	144.9724714	80.82837092	84.09370816	102.4489251
21.8	144.4021317	76.2299373	81.71748812	99.67765598
21.82	145.1377328	73.08861766	80.03918596	97.77262413
21.84	146.0850268	70.56394175	78.2510274	95.99139953
21.86	146.5765831	68.78193751	76.4626393	94.29357569
21.88	146.0379442	68.1931348	75.27841541	92.66871878
21.9	144.8676651	68.30567499	74.71797249	90.80872889
21.92	143.6687117	69.90843462	74.44592982	89.09704824
21.94	142.3415603	71.88093842	74.28959753	87.35487612
21.96	141.3089069	74.13445748	74.401712	85.77270604

21.98	139.7651259	77.38730913	73.6241804	84.25435737
22	138.9933967	80.86880878	73.96092932	83.1143786
22.02	138.1457791	84.95749317	75.17473152	82.10117302
22.04	136.3326585	88.23408535	77.05135403	81.83165335
22.06	134.8356416	92.08889777	79.24070988	81.67616746
22.08	133.7371736	95.33996461	81.38766609	81.8414683
22.1	133.1130387	98.10824957	83.42098089	81.56584184
22.12	132.281625	100.0460987	85.22105673	81.20846193
22.14	131.5942239	101.1805926	86.78152998	81.05552533
22.16	130.8688057	102.4089362	87.42898675	80.91938416
22.18	129.6893842	102.8883062	87.89354738	80.58225705
22.2	129.0820548	102.4252563	88.26768733	80.74350895
22.22	127.2805976	100.727385	88.20365962	80.38287693
22.24	125.7341157	98.83895945	89.08251997	80.14057235
22.26	124.3128031	96.71169987	88.88399029	79.65902922
22.28	122.6294994	94.13931338	89.61709172	79.59679341
22.3	121.4747497	91.28333502	89.96235716	79.19560421
22.32	120.2034968	88.12712205	90.26685711	78.75309536
22.34	119.4444838	85.34461725	89.81239053	78.61926282
22.36	120.0538497	83.09911316	88.76425523	78.11837395
22.38	121.0614946	81.79601072	88.32638892	77.50364142
22.4	123.0895126	81.66618364	87.76460107	77.23790171
22.42	125.6403438	82.62574679	86.76418445	76.78889777
22.44	127.7963353	83.97902215	85.25398928	75.88522095
22.46	129.8406229	86.58437961	83.45886743	74.51267267
22.48	131.6817686	89.39019921	81.1034776	72.55767621
22.5	134.2034867	93.27262817	79.02626656	70.42915259
22.52	134.7529417	96.98322783	77.0242249	67.94029932
22.54	134.1255375	100.7500344	74.77335727	65.72371726
22.56	132.9933542	104.075859	73.04754677	64.06139347
22.58	131.9379189	107.6001244	72.0967024	62.4296754
22.6	131.6322014	111.0733482	71.83186268	61.2240904
22.62	130.8289908	114.95919	71.6684053	60.38310446
22.64	130.470004	118.4086379	71.53013247	59.59161088
22.66	130.2128911	123.0647305	71.98574173	59.13323693
22.68	129.4621832	125.9048761	73.12705127	59.07149863
22.7	127.7057407	129.3892476	74.44464961	59.07817373
22.72	125.8032936	132.0664233	76.44403479	59.95963596
22.74	124.7323673	134.1691233	78.74375569	61.22893619
22.76	123.5423845	134.8947871	81.18843058	62.75325412
22.78	122.975589	135.2145687	84.50700273	64.25205582
22.8	123.1071534	135.9922014	87.90049146	65.89313884
22.82	123.5837355	136.2744039	91.63252402	67.57573364
22.84	124.8408747	137.0246547	95.6132794	69.40018
22.86	126.7361634	137.2896885	99.38345232	72.03630701
22.88	128.8138042	137.2088341	103.7083345	74.65718576
22.9	131.0000364	138.2815785	107.542521	77.10556477

22.92	134.2552927	139.5137264	112.0792436	80.47131661
22.94	138.4008575	140.9685337	116.4613186	84.17423905
22.96	143.0146344	142.4560269	121.5208848	87.69404692
22.98	148.4961088	144.5633583	126.0233977	91.5100273
23	154.5180099	147.4151583	129.5530721	95.27058247
23.02	160.3979047	151.4788229	132.2563262	98.75922237
23.04	166.4402154	154.862158	134.2820275	101.7466417
23.06	171.8115634	158.3794206	135.7034159	104.4311477
23.08	177.5382819	161.828738	136.0698898	107.0659905
23.1	182.3033674	165.4285388	136.1668864	109.2641855
23.12	184.6587795	167.421891	135.1408697	111.4307685
23.14	186.9116857	169.721444	133.2407453	112.9243442
23.16	188.6951643	170.7961948	131.2910658	114.0049469
23.18	190.066848	171.9686268	129.3996491	114.5353645
23.2	189.8310658	172.1290211	126.7624431	114.9802397
23.22	189.0915987	171.9880888	123.557117	115.2465841
23.24	188.7842785	171.8699353	120.4477925	114.6581424
23.26	188.023059	171.8624269	117.445131	113.3515745
23.28	186.9900172	170.7403924	113.6857205	111.560446
23.3	185.1608939	170.3872586	109.2207564	109.0925442
23.32	184.2107665	169.1418536	105.100182	106.3849358
23.34	183.0281545	168.3706998	101.1814501	103.7138052
23.36	182.028381	166.7702134	97.66744666	100.6887805
23.38	183.1020053	169.8659551	92.85867631	94.91490545
23.4	184.2969309	173.1452584	89.15310749	91.13923349
23.42	186.0666154	175.1599242	86.38735261	88.36255536
23.44	187.2871959	177.0310345	84.27438871	86.81260491
23.46	189.0479007	177.926846	82.83654869	85.91028415
23.48	190.2899535	178.7376479	82.21490747	85.17307918
23.5	191.6704379	178.6816402	82.40228436	85.37867934
23.52	193.6027556	176.7074416	83.24176155	86.99006977
23.54	195.3444908	173.9808828	84.23556881	89.58414501
23.56	196.9255466	170.9233209	85.73981191	92.78527556
23.58	198.1195025	167.7662514	87.55301952	96.07404995
23.6	198.1936596	164.4447174	89.64747497	99.4399373
23.62	197.4607695	160.8774618	91.9701891	103.4349621
23.64	195.4273132	156.0908302	93.66176863	107.011441
23.66	193.2765871	150.8924866	95.04944383	110.8833734
23.68	191.1306634	144.7783831	96.43174841	115.1953605
23.7	184.6313318	137.3029083	96.9051532	117.4575437
23.72	178.1210658	130.2053494	98.00448175	120.7629447
23.74	172.561529	123.3660107	99.58124381	123.6094155
23.76	167.1969936	116.5438315	101.4586854	127.2278522
23.78	162.381167	109.8704793	103.3131237	130.3652644
23.8	158.0646597	103.6513854	105.0647477	132.9619062
23.82	155.6415684	98.70934978	106.4771706	134.6068146
23.84	154.2052968	94.43923551	107.4696127	135.4995712

23.86	152.8726797	90.80534736	107.8215967	136.5413055
23.88	151.8396875	88.32765902	107.3248883	137.5029679
23.9	150.5534847	86.8073961	107.4264354	137.6431257
23.92	149.7262635	86.35299525	107.5251603	137.6765851
23.94	149.3137324	87.2991708	107.4076327	137.4092588
23.96	149.2981656	89.2380898	106.3563111	135.5938406
23.98	150.3482587	92.93621903	104.8401335	133.0148104
24	150.9877298	93.18398119	105.5929002	133.9020781
24.02	151.8169148	93.37756093	106.6899707	134.1228385
24.04	152.6232895	93.80306603	107.3521114	134.0516099
24.06	154.0685175	93.81345637	107.637113	133.6768278
24.08	154.8846344	94.39889473	107.6143412	133.9652422
24.1	154.8495318	94.91363434	106.9017343	134.5692588
24.12	153.8332673	94.54348367	105.9316604	135.0475781
24.14	152.0541207	93.96999899	105.1646112	134.9534554
24.16	149.5964081	93.3945404	104.3295257	134.191888
24.18	145.6579684	92.496667	103.8474426	133.3490919
24.2	137.5423117	91.31328951	101.5694833	129.1214865
24.22	130.3343462	91.02212256	100.0428415	125.9341905
24.24	123.9765103	90.58649105	98.78386895	122.6753989
24.26	118.6994185	90.38661948	98.03129639	120.3404237
24.28	114.0260613	90.32128729	97.43443624	118.0922368
24.3	109.1711902	91.27260593	96.78451613	115.299728
24.32	109.1292537	93.51632015	97.34337243	114.6104793
24.34	110.1960461	94.99549904	97.60543331	114.221441
24.36	112.3658884	96.49674689	97.69739711	114.7041248
24.38	115.8676428	97.69299424	97.67726464	115.0616544
24.4	116.8749429	97.47511477	97.4138467	114.4683204
24.42	119.1047578	97.55384366	97.48499949	115.3217798
24.44	122.1210608	97.360631	97.69778946	117.0638123
24.46	125.8467378	97.87883507	98.1374325	119.3274264
24.48	130.2648266	98.42460411	98.75376883	120.9694519
24.5	134.6832491	99.22978056	100.0020305	122.4976246
24.52	139.9248266	100.2003003	101.112071	124.154863
24.54	145.3566791	100.6653726	102.2120012	126.3046587
24.56	151.0270078	100.5569016	103.1260623	128.6579725
24.58	157.4686439	100.0764749	104.2324906	131.3845566
24.6	163.0272586	99.37912832	105.7950399	134.1128699
24.62	167.3919102	99.06348872	106.8503216	136.2795207
24.64	170.9575731	98.65204672	107.1635363	138.6077177
24.66	172.9338791	98.48278592	106.9603357	140.5016331
24.68	173.6655911	98.09535039	106.7419345	141.8389635
24.7	170.4323076	96.0254232	106.1209364	141.1351906
24.72	167.2720204	94.14527253	106.1692729	140.530811
24.74	163.9976105	92.63533623	106.3420498	139.8233239
24.76	160.4006745	92.03644453	106.171985	139.169912
24.78	156.3742916	91.6260815	105.8077227	137.4725645

24.8	152.0564445	92.08380322	105.2141774	134.3971585
24.82	152.4869774	93.58960663	106.2000182	134.4392527
24.84	153.3368167	94.33166346	106.7378552	134.4483487
24.86	154.6002831	95.09657802	106.9543867	134.9959581
24.88	156.5062393	95.55728082	106.9076135	135.0852048
24.9	157.7339488	95.8125048	107.202886	135.1298513
24.92	158.5276246	95.390991	106.9943655	135.3416604
24.94	158.4763566	94.70443826	106.5892244	136.121709
24.96	157.3873061	94.21883305	105.9040105	136.1040884
24.98	155.7340004	93.37411467	105.334863	135.1663555
25	153.2735595	91.7808292	105.402526	134.335131
25.02	153.5056669	92.27677622	106.6766498	134.9423036
25.04	153.9512125	92.3729103	107.4522328	134.77423
25.06	154.6307736	92.72791789	107.7142209	134.6986773
25.08	155.2755516	93.15657397	107.6091061	134.5906533
25.1	154.8037213	94.28435838	107.165228	134.802344
25.12	153.9115623	94.28208919	106.4120144	134.7120467
25.14	151.8554434	93.61868339	105.558649	134.6410567
25.16	149.5886318	92.97823238	104.6189868	134.2984002
25.18	146.0376883	92.3655769	103.8369441	133.5149358
25.2	141.7295389	91.49984731	102.7869097	132.1861108
25.22	136.8524077	90.558559	100.9666963	130.4855476
25.24	130.8629427	89.49377086	99.16413894	128.2360512
25.26	124.4032127	88.82216402	97.1505137	124.829906
25.28	117.6330023	88.40857013	95.49774295	121.3516867
25.3	110.1892588	88.33315098	94.28949843	117.6648933
25.32	106.6857923	90.79473961	94.04410052	115.1430175
25.34	104.1022651	93.06911518	94.48400849	111.9685418
25.36	102.4793306	95.76777025	95.38616341	108.9092133
25.38	101.05775	98.19106482	96.41520073	105.2635272
25.4	100.0423642	100.7575528	97.88877035	102.4127232
25.42	99.66406816	102.6184761	99.01464658	99.47967843
25.44	99.73450804	104.3935909	99.98381232	96.9968106
25.46	99.7264506	106.3914076	101.6566306	94.06599151
25.48	98.66272525	108.6299515	103.3151542	90.99589847
25.5	97.86248357	110.335229	105.6363353	88.29666599
25.52	96.87724138	112.4735989	107.4922672	86.27108403
25.54	97.18324704	114.9538578	109.5183264	84.5516574
25.56	97.80096066	117.0700465	111.5439286	82.77743655
25.58	99.47443321	119.2466104	113.981444	81.84559207
25.6	101.5363606	121.411712	116.4883477	81.33055718
25.62	103.9027859	124.0576944	118.8416887	81.0750723
25.64	107.4852483	126.5945768	120.0373951	81.25180504
25.66	112.2350116	128.8164	121.1223319	82.02049044
25.68	116.0907422	130.3473991	122.3305167	83.44613105
25.7	120.3217343	130.3269269	123.1863909	83.9959278
25.72	125.0990636	128.3164142	123.6745515	83.95387501

25.74	130.5561351	126.489817	123.4253575	84.24508848
25.76	136.102524	124.7747447	122.2127313	84.65723733
25.78	140.9496562	122.5381737	119.8964375	85.10844373
25.8	146.9048033	119.1781343	116.5882971	85.28453939
25.82	152.106309	116.1567398	113.0646708	85.5789817
25.84	157.2965649	112.8605137	108.9924977	85.24174335
25.86	163.4612499	110.1648569	104.4338821	84.41075134
25.88	170.1070321	107.6196107	99.6373061	83.5660724
25.9	177.5170806	104.9387987	94.96567196	82.40011629
25.92	184.9501709	102.7123481	90.73882192	81.05064314
25.94	191.9014248	101.1214875	87.58631308	80.05516938
25.96	198.4383345	100.5975063	84.07642229	79.61305794
25.98	204.3224441	101.3211781	80.15292446	79.99328345
26	210.9216432	103.981167	77.31704116	80.65759329
26.02	216.7446405	108.0242168	75.14194964	81.34941046
26.04	221.7150844	114.0420771	74.285135	83.44267267
26.06	226.0107665	121.7430569	74.61558499	86.56427141
26.08	230.4447042	131.6677268	75.99412377	91.57579533
26.1	236.0550399	143.945497	79.33282233	97.53850035
26.12	241.4570492	159.098015	84.60929012	104.8182354
26.14	248.2036424	176.6738841	92.36451916	113.4845313
26.16	255.9408535	196.2566357	102.4422935	124.109546
26.18	265.5284083	218.1376479	115.5295338	136.5774598
26.2	276.6541824	242.0606057	130.9632602	150.5730529
26.22	290.5706199	267.9606229	149.1954596	166.04126
26.24	306.3577935	294.4174183	169.4468177	182.6358944
26.26	322.8533947	320.6783932	191.9095166	200.5419962
26.28	340.0520042	346.832158	215.9545889	218.8594651
26.3	358.2577217	372.843698	240.6854738	236.9885155
26.32	377.2240712	398.0897371	265.7110699	255.2158034
26.34	396.0694509	422.569733	291.0092952	273.6771281
26.36	413.6986177	445.014865	315.6717878	292.0894448
26.38	431.082699	464.7911295	339.0395328	309.4376428
26.4	448.1928112	482.7798048	361.2115785	325.5208403
26.42	464.031529	499.4389928	380.8601982	340.1652604
26.44	479.1597047	511.6956204	397.6811801	352.6710719
26.46	492.7689311	520.4991455	411.7203944	363.270362
26.48	504.4808241	525.3880716	422.2781029	371.4305825
26.5	513.3194236	526.7430468	429.6809799	377.0337385
26.52	519.6784366	524.5074244	433.3146577	379.8370543
26.54	524.4471049	519.2817332	433.2569542	380.7020973
26.56	525.8763828	510.6175215	428.7597947	379.1950319
26.58	524.0712974	498.9937971	420.0917059	375.0795237
26.6	518.7675265	484.7370583	408.1521842	367.7600253
26.62	509.9033097	467.916666	392.4443533	358.7651077
26.64	498.4352978	449.3693751	372.8325796	347.7812873
26.66	485.6562666	429.2420467	350.768017	334.6135565

26.68	470.4790454	407.8065588	327.7683901	319.4709688
26.7	453.1962403	385.4209263	303.2758479	303.2812044
26.72	434.1927354	362.3859854	278.3099151	287.0276004
26.74	415.5636859	339.0868692	252.8636748	270.7021357
26.76	396.7318283	317.0873132	227.9709121	254.812791
26.78	377.5502589	295.8993376	204.6899666	239.2555274
26.8	358.5085186	275.5020083	182.8920194	224.5450157
26.82	340.8547174	255.2944049	163.2027728	210.3665275
26.84	322.6187724	235.8143179	145.7402569	197.7429942
26.86	304.2387886	217.5912428	130.7013753	185.9234129
26.88	286.9011872	201.3163121	117.9316078	174.9224188
26.9	270.2162615	185.8740115	107.3234645	165.1371453
26.92	254.1911184	171.462432	98.83950349	156.7363505
26.94	238.3526019	158.8823855	91.99924664	150.1217272
26.96	223.5581899	148.4819496	86.62226919	144.2299828
26.98	209.8381383	139.5922854	82.8468652	139.022971
27	197.569098	132.6123622	80.43601173	135.1771777
27.02	186.7651906	126.9477561	79.15749621	132.6746041
27.04	177.1902346	121.3945505	78.82683386	130.3252978
27.06	167.9730883	116.8104591	79.75294064	127.4823602
27.08	160.0037021	113.099554	80.75764587	124.737023
27.1	153.0032915	110.7041309	81.7843604	122.2240105
27.12	147.1941743	108.923245	82.38764991	119.4812964
27.14	142.0603843	107.9845171	82.614685	116.8996703
27.16	136.9190029	107.9091405	81.64414299	114.1957094
27.18	133.3856487	108.1401173	79.94839721	111.5143533
27.2	131.4201254	108.6144858	77.62182728	108.5114814
27.22	131.0249186	108.8833542	74.7182526	105.5437618
27.24	131.4334311	109.2587188	70.72822429	102.3460461
27.26	132.613065	109.6693781	66.97150774	99.00205784
27.28	133.5937071	109.8972707	63.34225705	95.36244514
27.3	135.0207534	110.6116372	59.27176459	92.43565072
27.32	137.207565	111.1029659	55.2950359	89.5541531
27.34	141.0482091	111.1516908	51.59030741	87.12928102
27.36	144.1464162	111.7908363	48.89759632	85.28568915
27.38	147.165497	111.2439691	46.78582566	84.0277925
27.4	150.5835464	110.1731631	45.46145515	83.33402265
27.42	153.6546102	109.3134978	44.91249671	82.89886136
27.44	155.6757397	108.8267216	45.19255233	83.37491152
27.46	156.9791637	107.4185014	45.86368288	83.38722014
27.48	158.1000415	106.7848579	46.98645768	83.34949439
27.5	157.771167	106.1163404	48.60440894	82.97006876
27.52	156.3886743	105.9555274	50.51995955	82.93685914
27.54	154.7580847	106.2284306	52.49990191	82.42097583
27.56	152.5949772	107.1434281	55.15478208	81.88114875
27.58	150.0209688	108.1391769	58.24049954	81.55131257
27.6	146.6793043	110.4420599	61.02075842	81.04828496

27.62	143.4669461	113.4992325	63.60259885	80.27405602
27.64	138.9768885	117.1244585	66.24434523	78.58177369
27.66	134.1736991	121.5020882	69.10829406	76.53019416
27.68	129.6304621	127.0169289	71.13289412	74.39597937
27.7	125.2170128	132.856392	73.08661644	72.5704591
27.72	120.7361038	137.8099272	74.81512084	70.4798827
27.74	116.4729336	142.861803	76.17710082	68.59083527
27.76	113.04351	147.3390555	77.13401456	66.90030539
27.78	111.1019749	151.0422773	78.11762261	65.07362929
27.8	110.1720366	153.9748559	78.29519769	63.02305086
27.82	110.0609991	155.9225877	77.76223986	61.25044089
27.84	110.8315189	157.915764	76.79601274	59.59444635
27.86	112.9383416	159.3781656	76.22826272	58.20998787
27.88	116.5534928	160.5648903	76.00541612	56.81592375
27.9	121.4855021	161.1975741	75.67424411	56.02168773
27.92	127.8190575	161.0556891	75.05789665	55.77064617
27.94	134.5918394	160.5144949	74.91746486	56.19793103
27.96	141.1486156	159.0748812	75.08552028	57.53600061
27.98	148.1745879	156.9217656	75.36307716	59.53903529
28	155.8760067	153.3763626	76.47288907	62.15329963
28.02	163.8942552	149.6345859	78.29751744	65.43223784
28.04	171.3547457	145.7495854	80.19421782	68.77972191
28.06	178.0047892	140.6393063	82.53702498	71.98641015
28.08	184.4743958	136.9682152	84.98405804	75.07428961
28.1	190.0427212	132.9485944	87.45153504	78.09914956
28.12	195.8865002	129.0598271	90.05716453	81.10881383
28.14	200.5469906	125.9596845	92.65582971	83.27885024
28.16	204.1745252	124.4036991	95.028739	85.48090707
28.18	206.8549813	122.999463	97.18831227	87.30822328
28.2	209.5057053	122.1332976	98.64124482	88.9585762
28.22	211.7202508	122.1544008	100.0157761	90.48869552
28.24	211.4286278	123.4285266	101.6226251	91.82507635
28.26	210.7504844	125.743061	103.0242684	92.59509961
28.28	208.4599646	128.9856598	104.1253019	92.80946304
28.3	206.0046082	132.4982728	105.4142168	93.57410456
28.32	202.5567701	135.9117029	106.0731227	93.55619274
28.34	199.6084609	139.8205774	105.952617	93.36796036
28.36	196.8626636	143.1118242	105.5796188	93.20784609
28.38	194.400901	145.4382395	104.8217201	93.00806452
28.4	192.4113783	147.3700445	103.6022864	92.46929315
28.42	190.0258277	149.855403	102.3067115	91.43965821
28.44	187.6196481	152.3314946	101.4128456	90.32929821
28.46	186.3790232	155.9524532	100.2636151	89.64486905
28.48	185.1246678	159.4067297	98.48844575	88.84528466
28.5	184.1516999	162.8643321	96.74439984	88.74917686
28.52	183.7070968	165.5707544	95.50491961	89.21098493
28.54	183.4607766	167.0130994	94.76038123	90.32122965

28.56	184.0995551	166.7422045	94.2681444	92.44871878
28.58	184.5485944	166.1145404	93.72499848	94.75078977
28.6	185.3824047	164.4722035	93.59407827	97.50086662
28.62	185.5840024	163.1596319	93.93124077	100.826395
28.64	184.5796188	160.8776803	94.24953989	104.1987542
28.66	183.5491708	158.1431469	95.33550207	107.1209799
28.68	182.7850531	155.5230226	96.76340176	109.4848923
28.7	181.3770007	153.034779	98.35800081	111.2846992
28.72	179.7673385	150.6999656	99.96498331	112.3094034
28.74	177.2558105	147.8759005	101.9523096	112.8270796
28.76	175.4795328	145.5748953	103.4216422	113.1834624
28.78	173.520722	142.2261503	104.8879149	113.5080625
28.8	172.0953827	139.0321418	106.3460289	113.3081484
28.82	169.535221	136.397031	107.5686187	112.3848326
28.84	167.406038	134.3657822	108.8209506	110.7280392
28.86	165.7941389	132.4066003	110.5152472	108.3429811
28.88	164.8802386	130.264232	112.0957974	105.5855607
28.9	164.4177733	128.1239549	113.7151249	102.7191718
28.92	163.7789402	125.1832733	114.7568915	99.12314996
28.94	163.9698938	122.6717929	115.4649601	95.23017292
28.96	166.5578309	118.8515623	115.7727435	89.02813429
28.98	168.5056447	116.4942128	115.7469876	83.53852563
29	170.0017727	115.3856163	115.9381222	78.82027708
29.02	171.0099949	115.1628506	115.7573445	74.98055921
29.04	171.9272191	115.0596329	115.4149166	72.22176358
29.06	173.232701	116.2458277	114.1713662	70.51705026
29.08	173.5812428	117.2442583	112.4082415	69.80566084
29.1	174.5996724	117.9735261	110.5610355	69.89964506
29.12	175.9891809	118.4196329	108.9861634	70.84760947
29.14	176.6295702	118.3888432	106.7703226	73.21242997
29.16	177.1080534	119.0029032	104.1969936	76.18009303
29.18	177.5045202	121.0557488	101.6564334	79.56020326
29.2	178.4529437	124.1354353	99.1966306	83.71473658
29.22	179.3368369	127.420988	97.1687572	88.95108504
29.24	181.3476853	131.0235767	95.09481849	93.96667105
29.26	183.5751947	135.4056962	93.68789969	98.84348468
29.28	185.5098443	139.6942401	92.4252159	103.6516796
29.3	187.4692456	144.9502235	91.04472242	108.6321307
29.32	189.0132976	150.5074173	89.66040853	112.9692901
29.34	189.9585206	156.0271736	88.73504702	116.8126797
29.36	191.7148185	160.9511022	87.81958843	120.2616554
29.38	192.6241895	165.0393801	87.56111639	122.4600718
29.4	193.6010304	168.7528931	88.21070988	123.0075508
29.42	194.5050986	172.2941844	89.4956305	122.7642856
29.44	195.432075	175.614147	91.20201638	122.3204267
29.46	196.0530509	178.0389402	92.91151583	121.4843614
29.48	196.167115	179.921619	94.03302761	120.245493

29.5	194.4806199	181.3651785	95.28171605	118.5008727
29.52	193.2894812	182.5213055	96.58500657	116.1144019
29.54	192.0013459	183.1484033	97.92391445	113.1826868
29.56	190.9292881	183.1085944	99.23747295	110.072882
29.58	187.1645748	184.760266	100.8924431	109.2531914
29.6	182.3877662	184.6345232	102.2775367	108.8927364
29.62	177.9782819	184.1955152	103.4494833	107.8535231
29.64	172.2509637	183.5886783	104.0027566	107.4906684
29.66	166.5972444	182.2782526	103.8847032	107.7797098
29.68	161.0771949	179.96144	103.4422105	108.3474426
29.7	156.2075923	177.0291091	102.724959	108.8237264
29.72	151.8160289	173.9770887	102.2409839	110.4826342
29.74	147.4258418	170.6446911	101.1382101	112.4103044
29.76	144.9814228	168.6104904	100.6784093	114.9975488
29.78	144.2230933	166.3724128	100.542434	118.0974618
29.8	144.4194519	163.9634412	100.2341561	121.9221893
29.82	146.0424684	160.7050693	100.2310466	125.5637577
29.84	148.3674143	157.8358156	100.4435049	128.4939822
29.86	151.0007443	154.7234382	101.0218091	131.2804965
29.88	153.9956497	151.1434048	101.3146071	134.1882273
29.9	157.7133522	147.354411	101.306667	137.6619507
29.92	161.2369178	143.5284326	101.1038993	139.9995571
29.94	164.3297583	138.4171848	101.6469572	141.6582202
29.96	167.2887552	132.7523946	102.2869269	142.8261493
29.98	169.2234897	128.1128072	103.1387471	143.2133795
30	170.1653069	123.8473708	104.0424876	143.165496
30.02	171.20757	119.4313025	104.7646446	143.3292507
30.04	171.9460481	114.4786541	105.323963	143.9804813
30.06	171.8407625	109.8692942	106.2208373	144.2250531
30.08	170.4049772	105.3021286	106.9473506	143.8579462
30.1	168.4705086	101.2647356	107.5471524	142.9998119
30.12	166.7320851	98.39131864	107.6132167	142.1202073
30.14	163.4720659	96.27722823	107.2659571	141.0840813
30.16	159.9849722	94.47093336	106.7266619	139.4012013
30.18	155.8336263	92.70488523	106.1032369	137.0899413
30.2	150.8788705	90.83760643	105.3316169	135.0502842
30.22	145.5552574	89.65856709	104.680995	132.7555496
30.24	139.5646749	88.74798766	103.0059581	130.9976803
30.26	133.8631449	87.40973809	101.1590221	128.6901739
30.28	127.5041511	86.27518859	99.10716048	125.9640773
30.3	121.5774649	86.3036303	97.05834361	123.0138649
30.32	115.6163454	86.94452321	95.37991303	120.5071706
30.34	110.1892588	88.33315098	94.28949843	117.6648933
30.36	106.6857923	90.79473961	94.04410052	115.1430175
30.38	104.1022651	93.06911518	94.48400849	111.9685418
30.4	102.4793306	95.76777025	95.38616341	108.9092133
30.42	101.05775	98.19106482	96.41520073	105.2635272

30.44	100.0423642	100.7575528	97.88877035	102.4127232
30.46	99.66406816	102.6184761	99.01464658	99.47967843
30.48	99.73450804	104.3935909	99.98381232	96.9968106
30.5	99.7264506	106.3914076	101.6566306	94.06599151
30.52	98.45744666	108.6636172	103.2190838	90.34064921
30.54	97.1729821	110.8877217	105.2321711	87.55889473
30.56	96.50972191	112.9082405	106.8724229	85.82975427
30.58	96.94874507	115.3366346	109.0795975	84.35409445
30.6	98.40156335	117.0391051	111.4721519	83.24624532
30.62	101.20297	118.9456477	114.075585	82.8794054
30.64	104.3581778	120.8493912	116.5515118	83.00148751
30.66	107.211621	122.5020609	118.9746435	83.04626858
30.68	110.8442259	124.3934665	120.0158914	83.27067246
30.7	114.1196703	126.1202609	120.7061462	84.24817373
30.72	117.1148974	127.7015381	121.3734907	85.29392456
30.74	120.071442	128.334232	121.7128699	85.60557084
30.76	124.0362332	128.0426888	122.0886975	85.48611791
30.78	128.0657427	127.0706977	122.6497624	85.565856
30.8	132.7407786	125.6111164	122.6444089	85.58372131
30.82	136.8324077	124.0703418	122.0947285	85.25923956
30.84	141.088555	122.2412489	120.7937001	84.15293862
30.86	145.1204217	120.795589	119.3681484	82.53874001
30.88	149.4899929	119.9099929	117.8486025	80.73949135
30.9	154.7312489	119.469908	116.0424148	78.88705329
30.92	160.5702882	118.4762059	114.0935787	76.75558702
30.94	166.499279	117.6490808	112.9427172	74.8720184
30.96	172.5154515	117.3605137	112.2906431	73.46784913
30.98	177.2632845	116.6697067	111.8178006	72.07040955
31	181.6119921	116.1997978	111.1820578	71.33115381
31.02	184.2265962	116.5571928	109.8001487	70.38035696
31.04	187.2700435	117.3553888	108.6224765	69.78698352
31.06	190.3794236	118.4167337	107.2062544	69.04422692
31.08	192.1879058	119.4253423	105.5677925	69.39981798
31.1	193.1896906	121.1511336	104.9057822	70.21519769
31.12	193.7574972	122.4001466	103.4952988	71.65862575
31.14	194.5157276	123.888022	101.8447194	74.57610577
31.16	194.9350976	126.0441794	100.0305198	77.67936798
31.18	194.4861594	129.7029588	98.43276469	80.32014764
31.2	193.825858	133.5680291	96.87045303	83.563423
31.22	191.3087127	138.5080716	95.5999191	86.91873799
31.24	187.9197856	143.3110982	94.715135	90.28156335
31.26	184.4845546	148.4728132	94.4629912	93.862432
31.28	180.7662918	154.5667115	93.86164223	97.72330974
31.3	176.095496	159.7927515	93.87998888	101.7859268
31.32	172.0834007	164.4936313	94.48233593	105.484684
31.34	167.1031328	168.7941349	95.17415714	108.9503074
31.36	162.0973455	173.3362878	96.2066124	112.4464658

31.38	155.9965891	177.1841157	97.89622712	115.2849651
31.4	150.2450713	180.6466225	99.71385074	117.3831136
31.42	144.0744605	184.0674932	101.6406249	119.0563677
31.44	138.9304358	186.7997027	103.7572525	120.90622
31.46	134.3540257	189.5453504	105.8285004	122.5932106
31.48	131.2926423	190.7329376	107.6214663	124.4027829
31.5	128.5930226	191.1001861	109.1279422	125.7260168
31.52	125.7892396	190.5836111	110.9393387	126.8403236
31.54	123.0751138	190.6388725	113.4232612	128.0951138
31.56	121.5155759	189.9630003	115.5963212	129.40928
31.58	119.7927303	188.8089979	117.6341804	129.9926888
31.6	119.1421468	187.5613287	119.3377955	130.7395642
31.62	118.6292436	186.0709586	120.3410122	130.8779715
31.64	119.8862271	183.7103246	120.8362241	131.1519335
31.66	121.3139215	180.5815168	120.416485	130.983063
31.68	123.2008454	177.4652715	119.3281181	130.8871898
31.7	126.4072505	175.0852179	117.9866286	129.5112195
31.72	129.684505	171.4766963	115.4300829	127.1961422
31.74	132.8619072	168.6345091	112.0542471	124.6975174
31.76	135.5024451	166.2984437	108.5296906	121.5623096
31.78	137.9593134	164.5242441	105.1044726	117.4333249
31.8	140.10694	162.3050662	100.9524229	113.5253251
31.82	140.7711892	159.7741298	96.69908788	109.6574487
31.84	142.047389	157.4913793	91.73802811	105.7036677
31.86	143.4445485	155.3679432	86.5198382	102.2524987
31.88	144.2889038	152.5221145	80.9717747	99.17160987
31.9	144.3183871	149.0052776	76.1531439	96.36521286
31.92	144.2454869	145.5599828	71.26997169	93.95877338
31.94	143.4835959	142.0685277	66.11083325	91.71375468
31.96	142.7994378	139.2604247	61.36921933	89.47579027
31.98	142.0461422	135.9965234	57.59841339	86.97448276
32	141.621806	133.3415856	54.37612903	84.91686116
32.02	140.7825655	131.1989382	51.41695318	83.41111841
32.04	141.161263	129.38721	49.14875316	82.29745879
32.06	142.4498999	128.6963576	47.71191324	81.20997674
32.08	144.4999717	127.7971382	46.80055921	80.57491354
32.1	146.6837071	127.20306	46.57853979	80.15167358
32.12	148.7053848	126.7520224	47.35321064	80.21302053
32.14	150.7910759	127.4873486	49.05923147	80.59040449
32.16	152.7654647	127.8412853	51.44897866	80.81823036
32.18	153.3803115	129.273512	54.28157852	80.69636263
32.2	154.2854212	130.3948498	57.17331378	80.40291132
32.22	155.2716099	132.1284902	60.68990292	79.93015775
32.24	156.5487501	134.3173445	64.30286177	79.54153099
32.26	157.129822	137.1593103	67.61789766	78.54525129
32.28	159.046393	141.0007554	70.35291132	77.81302053
32.3	160.6905531	144.7627657	73.22286581	76.77834463

32.32	162.172523	148.0916726	76.12730812	75.86645768
32.34	162.7300829	152.457027	78.62847912	75.36205683
32.36	162.0499221	157.0678279	81.40804025	74.66829103
32.38	160.5878825	161.7504025	84.06120841	73.43719082
32.4	157.515041	165.7380018	85.83526241	72.79557084
32.42	153.6641096	170.0378006	87.45885024	73.25992416
32.44	150.0639155	174.7815472	88.30416827	74.47651026
32.46	146.5756608	179.5898716	88.8264779	76.56669228
32.48	142.6411801	182.5726444	88.57891293	79.32327131
32.5	139.0653767	185.0269198	88.13516534	82.88058044
32.52	136.4953696	187.6130397	86.45235615	87.33223885
32.54	134.3200637	189.8773334	85.04032359	92.64731115
32.56	131.6310193	191.9785408	84.00007786	98.21936091
32.58	129.3453383	194.0643634	83.415766	104.6417332
32.6	127.2542198	196.6304318	82.57377692	111.0632905
32.62	126.4598665	199.5801254	82.12443624	117.2012104
32.64	127.3040014	203.3444838	82.92818182	123.3590029
32.66	129.0492315	206.5196916	84.40861968	129.8366326
32.68	131.126666	208.8301355	86.2892345	136.101347
32.7	134.3916412	210.7710557	89.43951461	141.5031095
32.72	137.8476438	212.91405	93.63446355	146.1369582
32.74	141.4252927	215.02649	98.58212155	149.9682334
32.76	145.247567	216.219726	103.9273789	152.5941905
32.78	149.0849398	216.8168227	109.8737122	154.7217322
32.8	153.9509394	216.7031651	116.5844787	155.9942573
32.82	159.3719011	217.2249055	123.8621448	157.3776034
32.84	164.4730681	216.723241	131.1112448	157.8765669
32.86	169.2526565	215.6540712	137.902251	157.5072343
32.88	175.3158307	213.902884	144.8238447	156.5374113
32.9	180.769009	211.9527637	152.3674295	155.6623835
32.92	186.160634	210.1015967	159.2903873	154.2141106
32.94	190.2752139	208.7769107	165.9842118	152.3031115
32.96	193.8017049	206.9583851	172.5352594	149.7588401
32.98	196.5004439	204.0999596	178.087031	147.3760036
33	198.647206	200.8346355	182.5047315	145.4062251
33.02	200.1188209	198.1108009	185.3967206	144.1113662
33.04	201.5786925	194.9489342	187.2437628	142.477747
33.06	203.5663576	190.8277885	187.2472252	141.2261826
33.08	204.7642269	184.6154212	185.1612782	140.8650945
33.1	207.0713156	178.7841764	181.9666225	140.9289281
33.12	208.8112671	172.8867166	177.6382213	141.395942
33.14	209.8910355	166.1523117	172.8635433	141.9513581
33.16	210.7241228	158.9176823	166.8887066	142.6698594
33.18	212.0942755	153.1628739	160.3838143	143.8506067
33.2	213.3895389	148.0931945	152.7249328	144.3352472
33.22	214.9225908	144.0851037	145.1856153	144.4985317
33.24	216.8453292	140.2682971	138.0999747	144.2408231

33.26	219.2903438	136.5668986	130.9433846	142.9672798
33.28	222.2914329	133.9381626	123.641439	140.3838497
33.3	226.1081474	131.9552958	116.8898422	137.1115998
33.32	229.7434958	130.1869967	110.3208393	133.3102103
33.34	232.8236151	128.4741804	103.7338194	128.7832996
33.36	235.4047244	127.3905845	98.33162504	123.779191
33.38	238.197117	127.1925442	93.62355648	118.2978967
33.4	240.4527172	127.8008767	89.1404328	112.9509597
33.42	242.6297037	128.8079432	85.24613004	107.9386915
33.44	244.587296	130.5491779	82.33392355	102.6469613
33.46	245.6680514	133.0788088	80.13379513	97.75405097
33.48	246.2643432	136.6377055	78.894865	93.27176661
33.5	244.865859	140.8199596	78.72930933	90.0937567
33.52	242.6446122	144.5171767	79.53507331	86.82504601
33.54	239.5011791	148.4482	81.50643847	84.12119325
33.56	236.0078036	151.9989888	84.29563555	82.22869855
33.58	230.7018718	155.2168045	87.46502781	81.28930023
33.6	223.9257852	158.7285661	90.88151178	80.71519062
33.62	216.2784377	161.8481798	94.27457478	81.50897158
33.64	208.7245333	163.4035039	97.27026797	82.96952472
33.66	201.5709354	163.8750662	99.66548387	85.6154414
33.68	193.7123299	163.8803398	102.1057053	88.94833451
33.7	187.4936445	163.5735231	104.6447174	92.58708666
33.72	181.4454475	162.064322	107.6145343	96.93571443
33.74	175.5278077	159.1890242	109.9638477	102.0246799
33.76	169.3739842	156.2864304	111.9471928	107.547478
33.78	164.2919304	154.4247477	113.6801709	112.711444
33.8	159.246938	151.8080918	114.7864668	117.2533249
33.82	155.4136859	149.2644514	115.5494317	120.9363737
33.84	153.4585539	147.0861007	116.040628	123.7689888
33.86	152.5553615	145.5019638	115.5385135	125.2111093
33.88	152.8570745	143.3253241	114.1965234	125.6635969
33.9	154.5172131	140.7029376	113.0368864	125.1325685
33.92	156.7981687	137.5641602	111.3394873	123.3537527
33.94	160.0875114	134.8449752	108.5196451	120.6351299
33.96	163.7643483	133.0149328	105.1913257	117.6268996
33.98	168.3491728	131.4780483	101.3450359	114.2155172
34	173.0844747	130.6701143	97.16332895	110.9810749
34.02	177.8727424	130.883962	93.32631611	107.8396542
34.04	181.9158894	131.7329851	89.93379411	104.5996734
34.06	184.6864981	132.3203782	86.03331479	101.2927384
34.08	186.8770331	132.8101355	82.59092527	98.19965719
34.1	189.19748	133.3041865	80.14196076	95.27336131
34.12	191.2291809	134.0394802	78.1426484	92.13602386
34.14	192.2653261	134.929553	75.97106077	89.80361513
34.16	192.0875356	135.2019901	73.83282132	88.18493983
34.18	191.0953999	134.8451967	71.96245121	87.5125048

34.2	189.9346183	134.1906765	70.01923754	87.56388007
34.22	188.6644383	133.5982425	68.30470725	88.68906866
34.24	186.3031125	132.5748913	66.33648903	89.98761452
34.26	183.2663394	131.8568237	64.86565072	92.0982617
34.28	179.9559329	130.7153929	63.68960461	95.09125999
34.3	178.144412	129.2625978	63.03371119	98.38416827
34.32	175.5848256	127.6003651	63.43523208	101.4835433
34.34	172.5638892	126.3148114	63.70262615	104.535229
34.36	169.7092315	125.2055587	64.68823036	107.4728051
34.38	168.5517575	124.4363141	65.75464961	110.2637142
34.4	166.5150399	123.4162949	66.98084235	112.294141
34.42	164.7698069	122.9003347	67.87017191	113.494955
34.44	163.229553	122.0045131	69.01387906	113.6597603
34.46	162.5691506	120.070544	70.1243695	112.6958702
34.48	161.6499949	116.5618576	71.60249166	110.6982738
34.5	160.9851765	113.3457518	73.04772474	107.9420032
34.52	160.8003691	110.382436	74.01437456	104.7788057
34.54	160.5017555	107.4638588	74.61332592	100.9420942
34.56	159.6113631	104.7614005	75.65324906	96.81801092
34.58	159.1169896	102.5626535	77.17937709	92.09696531
34.6	158.1330043	101.3983375	78.39765194	87.72056325
34.62	157.602434	100.8901395	79.94915158	83.3461078
34.64	156.7578643	101.3544332	81.48555365	78.70528972
34.66	156.2372292	102.9910304	82.99489028	74.52121448
34.68	154.9056386	104.8231388	85.11338154	70.38182223
34.7	152.904234	106.644412	87.41574477	66.17783699
34.72	149.680542	108.1708676	89.18622712	62.46176459
34.74	146.3257438	109.6002306	90.56796845	59.69261806
34.76	143.7120265	111.3944787	91.68935989	57.25239761
34.78	141.1444332	114.0207412	92.86946607	55.98179998
34.8	137.7698908	117.4414632	92.81283547	55.09820002
34.82	133.9782192	121.535944	92.17810901	54.78849732
34.84	129.8150834	125.9972019	91.01521185	55.06955506
34.86	126.9222641	131.2444089	89.83757711	56.0721175
34.88	125.3118465	136.5537324	88.38119729	57.13918091
34.9	125.0192173	142.0593832	87.11606735	57.90329052
34.92	123.7170634	147.2544484	85.58857114	58.81132774
34.94	123.3087673	152.2203448	83.72494893	60.29110729
34.96	124.331532	155.9385014	82.06888361	61.430901
34.98	125.4295945	159.5625402	80.10202548	61.82456265
35	125.6458904	162.0833107	78.22236525	61.65314289
35.02	126.1319213	163.6665244	76.08052179	61.04192537
35.04	127.2179988	163.7019244	73.87690666	60.11387704
35.06	129.3037415	162.8462797	71.25847103	59.12455961
35.08	130.6606401	160.5337719	69.23585398	57.56643139
35.1	132.2115725	158.1061887	67.00962281	56.61977551
35.12	134.1534907	153.6289847	64.84554556	55.66819395

35.14	136.0562241	147.8815735	62.56462635	54.56801395
35.16	137.3487046	141.978108	60.62656083	53.93192942
35.18	138.7761675	136.34784	59.08809081	53.39331378
35.2	139.7998584	130.6666084	57.86467489	53.03353625
35.22	140.55856	125.3374527	57.81418647	52.64907675
35.24	140.1699231	120.7569542	57.82447265	52.58689554
35.26	139.9401385	115.9863586	58.43467792	53.36084336
35.28	138.7860259	110.9304136	59.72718576	54.51994539
35.3	137.9775447	105.9922965	61.59028719	56.0663606
35.32	137.1692921	102.1919992	63.81517747	58.50594499
35.34	136.6137264	99.16423703	66.49901001	62.04696228
35.36	135.4392305	95.746667	69.1560815	66.22815148
35.38	133.4168258	93.0010274	71.70749115	71.44793609
35.4	131.2898938	91.23607139	73.76688037	76.75742239
35.42	128.8382273	90.32339064	76.23971079	82.54781575
35.44	126.808381	89.95751744	78.85658206	88.67627566
35.46	124.6453534	90.20237436	81.64067246	95.53352715
35.48	123.1822429	90.50746284	84.02213975	101.9455971
35.5	122.3771534	91.4127748	86.92969866	108.4222702
35.52	121.3093002	92.6408919	89.47813328	114.7168723
35.54	121.3634048	93.82604106	92.22848519	120.8391991
35.56	121.8568298	94.92056022	94.85747396	126.0152301
35.58	121.6761826	96.84838406	97.71910304	130.7699778
35.6	121.8645647	99.03984832	100.4833704	135.2817959
35.62	123.0526737	101.3647821	102.941895	139.2770826
35.64	124.3416018	104.0784832	104.9352442	142.8224108
35.66	125.0317818	107.2277601	106.7764668	146.0288806
35.68	126.0721762	110.4790494	108.9673668	148.6468945
35.7	126.4550319	114.5765325	110.0150592	151.5171837
35.72	127.3971928	118.1829042	110.6251522	153.7240803
35.74	128.6984781	122.096039	111.0670371	155.5091415
35.76	129.3480129	126.6079745	111.7844726	156.6137688
35.78	130.62288	131.597029	112.266668	157.0278249
35.8	131.6977096	136.8508039	113.0212954	156.7397098
35.82	132.566484	142.6672019	114.4053453	156.3597917
35.84	133.5524067	148.7446122	115.6922298	155.3528668
35.86	135.4249934	154.6475094	117.4258914	153.7041865
35.88	137.0966235	160.8045879	119.4582657	151.2341571
35.9	139.2139013	166.5903145	121.8085054	148.5900637
35.92	141.0664324	172.5936707	123.7404217	145.5522287
35.94	143.1550157	177.0758358	126.3142552	142.6131429
35.96	145.1294883	180.4606533	128.6221124	139.294958
35.98	147.5634847	183.8601648	130.6008585	135.5957245
36	149.9008252	186.7110234	132.3309192	132.2559106
36.02	152.2654171	188.1105299	133.7132288	129.2124532
36.04	154.7978168	188.4235474	134.6962625	126.0307261
36.06	157.6339175	188.0562211	135.323874	122.5688169

36.08	161.3038882	186.3926272	135.501532	118.3946779
36.1	164.5132248	183.2468086	135.966035	115.1767691
36.12	167.3449611	178.791986	135.7721266	112.2720214
36.14	170.892073	173.7421438	135.4718172	110.0284073
36.16	174.64099	168.1074699	134.8393366	107.6275801
36.18	178.0165113	162.488202	134.2522247	105.8246314
36.2	180.4338952	156.2845171	132.7068642	104.2010921
36.22	182.2331125	149.4112175	130.9728456	103.0431156
36.24	182.8538619	142.8441157	128.3156325	102.0201658
36.26	183.4043139	136.2520629	125.5449105	101.9652927
36.28	184.3078198	130.0043958	121.9347993	102.5382819
36.3	183.784415	123.7837456	117.7866084	104.0343624
36.32	182.9757185	117.4816382	113.561624	105.9513014
36.34	181.8455536	111.4516928	109.2268996	108.0932177
36.36	179.5890191	106.5082577	104.6905885	110.7538275
36.38	176.3029963	101.8719254	100.1448144	113.7541693
36.4	172.5397826	97.59665993	96.53967742	116.0710476
36.42	168.5712216	94.0035403	92.9429912	118.7007291
36.44	164.2947022	91.52667105	89.6422884	120.5812337
36.46	160.2151431	90.17957225	86.69560926	122.4291415
36.48	155.112251	89.87711599	84.48513298	123.997481
36.5	151.1606128	90.31619881	82.61545657	125.327565
36.52	147.3224239	91.63100415	80.7410901	125.5611983
36.54	144.0434746	92.96236424	79.7943968	125.8231611
36.56	140.8504389	95.32602386	78.88775104	125.7054313
36.58	138.0156315	98.48140965	78.58532106	125.32036
36.6	135.5783932	102.3359662	78.54364648	124.9727596
36.62	133.9799171	105.4402609	79.25986551	123.787113
36.64	133.0466033	108.4929022	79.95703307	122.1439822
36.66	133.1082637	111.7101881	81.01627465	120.0026191
36.68	134.1973921	114.6283204	82.32708363	117.8445182
36.7	135.8253281	117.1107382	84.17576803	115.184952
36.72	137.9534058	120.0210072	85.93637678	111.9350035
36.74	140.3897654	122.6675073	87.50273435	108.3880756
36.76	142.3861088	124.9409829	89.41789868	104.8058054
36.78	144.0053484	126.7063485	91.32129336	101.8165497
36.8	145.6686055	128.1909718	92.72490747	98.57323895
36.82	147.8833916	129.4794519	94.35228031	95.56594499
36.84	149.5251997	131.0442552	95.50147841	92.71119122
36.86	151.3251744	132.4767641	96.80780362	90.58651835
36.88	152.1303812	133.2786419	97.84897765	88.21388614
36.9	152.08595	133.4420477	98.93167155	86.51444534
36.92	151.8376267	133.1494024	99.64013146	85.4498645
36.94	151.9654202	132.4626848	100.3856072	84.60114572
36.96	151.0980018	132.0055941	101.5151219	84.37936697
36.98	149.1035029	130.772879	102.8158105	84.27216301
37	146.8439185	129.4862514	103.8977733	84.43556174

37.02	143.107842	128.0541855	104.4633684	85.31408535
37.04	138.3796178	126.3655304	105.0828597	86.14040955
37.06	133.6962352	124.4845879	105.779819	86.87952978
37.08	129.3042158	123.1031075	106.1727758	87.35908686
37.1	126.1368339	121.7116817	105.7283456	88.16965618
37.12	121.9354272	120.9649712	105.196849	89.08835676
37.14	118.0656244	120.8545222	104.6651835	90.55769845
37.16	114.2330013	120.9996774	104.5023744	92.02267368
37.18	111.6717666	121.4776074	104.178917	94.02569016
37.2	109.2097593	121.4072899	103.4368015	96.22275154
37.22	107.6552503	120.8066094	102.6116018	98.38811508
37.24	106.9269249	121.2119951	101.4025311	100.386033
37.26	106.2374821	121.5632157	100.7239134	101.5621731
37.28	106.5704813	121.8007483	99.78125999	102.1136343
37.3	106.7887896	121.4508929	99.03739407	101.6308049
37.32	107.8796208	120.890629	97.58602791	101.1831115
37.34	109.589463	120.2743301	95.86894327	100.1744959
37.36	111.9466539	119.7220437	94.23484882	98.99330772
37.38	114.0411447	119.0921873	92.75997371	97.52276469
37.4	116.9227526	118.8883618	90.9179371	95.99543735
37.42	119.6583932	118.6632066	89.16347356	94.14232784
37.44	122.4140206	118.0833249	87.4569006	92.31091718
37.46	125.8902154	116.6420326	85.94335019	90.22929113
37.48	129.3836445	115.35838	85.0760087	87.52688341
37.5	132.9602356	114.3819608	84.18186672	85.32900597
37.52	137.2066832	113.777474	83.40447164	83.16283042
37.54	141.8156315	113.4208221	83.28565881	80.80205784
37.56	145.1095278	112.8091101	83.69006573	78.29012741
37.58	147.7912023	111.783693	83.82029831	75.76144403
37.6	150.3897866	111.0136343	83.99244008	73.14882395
37.62	152.4299555	110.0866357	84.65545556	70.55247244
37.64	153.9170806	109.3433684	85.42589443	68.18522298
37.66	154.8590585	108.6571979	85.3799373	65.62921124
37.68	155.7747851	108.0647406	84.77080089	63.64383355
37.7	155.5927728	107.507299	84.01563859	62.26655779
37.72	154.4922914	107.5844261	83.85175852	60.94291132
37.74	153.408292	108.0106543	83.74260593	60.33435332
37.76	152.0222206	108.2596764	83.63413085	60.26726868
37.78	150.3507837	108.0944696	83.02248053	61.3292254
37.8	146.4485357	107.9740216	82.81316716	62.36373445
37.82	142.2723066	108.3580332	82.50684801	63.48057741
37.84	137.0874861	108.0488968	82.35593387	64.60046719
37.86	131.5814966	106.6455486	82.18679442	65.88755486
37.88	125.4304298	105.1315441	81.77753767	66.90593083
37.9	118.8855658	103.2034776	81.35150976	67.80068258
37.92	112.2989746	101.6898534	80.66652341	68.83625038
37.94	105.1342532	100.4699039	80.33994843	69.84975933

37.96	98.06158358	99.38732834	79.83278491	71.1014501
37.98	90.39651431	98.02941855	78.98625645	72.73695419
38	83.64641622	96.72612903	77.26154717	74.68334918
38.02	76.91451714	95.92661442	75.96421782	76.45662858
38.04	71.46574376	95.05787441	75.21912934	78.43158257
38.06	66.40077258	94.29366468	74.8119911	80.33226211
38.08	62.30960663	94.26980382	74.46437961	82.64867631
38.1	58.57142482	94.5898645	74.2746122	84.78452119
38.12	56.39956214	94.85826979	74.44015269	86.90971686
38.14	55.3060724	96.26036	75.03427445	88.39816463
38.16	54.79112044	97.69296592	75.70961169	89.25088684
38.18	55.68975225	99.39068359	75.99134796	90.27258873
38.2	57.70654869	100.9950784	76.86814845	90.82860855
38.22	60.62984629	102.8993933	78.363604	91.01054707
38.24	64.43258873	104.1859177	79.54000101	90.33130246
38.26	69.59691576	105.7607756	80.01603903	88.95743958
38.28	76.1824593	108.1209657	80.87785924	87.55123167
38.3	83.20046516	110.5564011	82.32769137	86.08546971
38.32	91.31086055	112.8115259	83.70553747	84.28274345
38.34	99.84393872	115.0529447	84.77075134	82.62023865
38.36	108.3891162	116.7692284	86.16585297	81.04455658
38.38	116.2657852	118.3191435	87.92580746	79.825045
38.4	123.333785	120.2288492	90.25881889	78.35476085
38.42	130.5984437	121.9102144	92.09049247	77.13352917
38.44	137.6905643	123.0204692	94.1844959	76.17984225
38.46	144.1903519	124.940001	96.09062999	75.32911922
38.48	148.9489473	127.4436546	98.33124987	74.11006371
38.5	153.0224745	129.7767479	100.0308959	73.49961978
38.52	156.0770877	131.338198	101.3859956	72.81813126
38.54	157.6524654	132.6351057	102.2394721	72.87049348
38.56	157.4846729	134.290628	102.1651653	72.91686217
38.58	155.851986	135.8581515	101.799009	73.42431186
38.6	152.8819749	138.2930134	101.6257124	74.16334109
38.62	148.6052877	141.5484548	101.4609263	75.62223177
38.64	143.5979452	143.8304824	100.7236677	77.07710385
38.66	137.2797705	145.7454647	99.81277278	78.78633532
38.68	131.1444069	148.1955213	98.93707655	80.98317525
38.7	125.2965972	150.453061	98.4551805	82.73289412
38.72	120.079098	152.2222368	97.52203661	84.95681565
38.74	114.6966448	154.1959268	96.45070583	87.08078673
38.76	109.9490474	155.3852098	95.24605016	89.48207604
38.78	105.8139589	155.8522419	94.1755314	91.24212762
38.8	102.9715735	155.5764334	93.790721	92.2579098
38.82	101.1443129	155.0473607	93.45356254	92.52906057
38.84	99.87670543	152.5302265	93.28339974	92.3766033
38.86	99.25552938	150.4945768	93.76047123	92.37084336
38.88	99.68710689	148.1196178	95.05431894	92.07458085

38.9	101.891532	145.2227637	96.73311255	91.70101122
38.92	105.2024219	141.7099009	98.09082718	90.91952371
38.94	108.8946789	138.5817868	100.2123703	90.65254222
38.96	113.5545313	135.2817474	103.2506684	90.7739367
38.98	118.9221519	131.6881242	106.8026433	91.03154111
39	125.5844959	127.6583477	110.551622	91.31705127
39.02	132.5210385	124.4153736	113.8961422	91.35113156
39.04	139.3966923	121.9527465	117.5911488	91.31913743
39.06	145.2744453	121.0193528	121.0205086	90.99882395
39.08	150.389281	120.9751502	124.3434968	90.47553949
39.1	154.7201648	121.6958105	127.0763151	90.37622206
39.12	158.7626353	123.2280817	129.5081758	90.19287592
39.14	161.2791617	126.8892244	131.5818313	90.42065932
39.16	162.042248	131.6368783	133.1649621	90.19080797
39.18	161.3237304	137.21216	134.2500576	89.90965416
39.2	159.1561644	143.007027	134.6392153	89.47027202
39.22	156.595405	149.2940307	134.1927242	89.24023966
39.24	153.445497	154.9118607	133.3255304	88.12625645
39.26	150.1323248	161.3670877	132.4235767	87.32408838
39.28	146.6112357	167.9302761	130.8892921	86.72922641
39.3	143.3629305	173.4410557	128.534865	86.51857114
39.32	139.863239	177.7791708	125.7470685	86.31526342
39.34	136.2837496	181.7437152	122.5893832	86.25325918
39.36	133.3338204	185.5419385	118.5758621	86.30232076
39.38	131.0199838	187.3742037	114.2208757	85.98723127
39.4	129.3317868	188.5256012	110.2779745	86.52293963
39.42	127.1528385	188.6504338	106.3910739	87.27242391
39.44	125.1910527	187.423245	102.7457943	87.90622611
39.46	123.5928759	186.0886986	99.41297705	88.26784407
39.48	122.705043	183.5540904	95.96242694	88.61044898
39.5	122.1112256	179.4758671	92.39979877	89.35164728
39.52	121.1079887	173.9013621	89.36584892	90.4825766
39.54	121.0319486	168.3838598	87.19706644	92.41031651
39.56	122.0005966	161.5964031	85.19652847	94.48069876
39.58	123.2107159	153.8494024	83.36408939	96.78921124
39.6	125.137659	146.1481313	82.17957731	99.2867297
39.62	126.3502255	139.2927556	81.20412175	101.8398433
39.64	127.3436576	132.734321	80.63678431	104.2586369
39.66	128.3028415	127.0148114	80.05332693	106.4470331
39.68	129.3639053	122.1971099	79.68292143	108.6082253
39.7	129.6781454	118.501716	79.41305997	110.1236647
39.72	129.7811912	115.60685	79.44979371	111.5110881
39.74	128.7469319	113.708646	79.61177571	112.2942906
39.76	127.5384811	111.9410365	79.91044191	112.5512661
39.78	126.3076479	111.1512145	80.70103853	112.5162312
39.8	125.6364152	110.4732025	81.58022449	111.8649742
39.82	124.9375801	110.9406876	82.69397917	110.9528638

39.84	124.4696805	111.9742209	83.91303469	109.0041592
39.86	124.8153524	113.0960138	84.98234301	106.9577551
39.88	125.03072	113.2958813	85.75273233	104.868921
39.9	126.0336515	113.8107655	86.48152998	102.3067024
39.92	126.1830397	113.8650551	87.31251795	99.39449692
39.94	126.0605572	114.9793457	88.07966225	96.5535585
39.96	125.8391597	115.6280423	88.56612701	93.6610628
39.98	125.6091627	116.0127799	89.16642937	90.88751744
40	124.9569673	116.950811	89.68596016	87.84516534
40.02	123.6112084	117.9046233	89.55402467	84.34728183
40.04	122.8395551	118.7949661	89.3987026	80.56012741
40.06	121.4296815	119.1825624	89.46175043	77.01980584
40.08	119.8557195	119.5187077	89.51998079	74.25429872
40.1	117.4186025	118.9363293	88.90318435	71.85960663
40.12	115.0870685	118.3851522	88.79440692	69.81711801
40.14	112.9080696	118.0765143	88.49547073	68.58768733
40.16	110.6203802	116.0651097	87.823153	67.96504904
40.18	108.6328294	113.4714713	87.36138942	68.27629184
40.2	106.8381859	111.2721074	86.83556477	69.39762463
40.22	104.9178451	109.175312	85.43725149	71.14399029
40.24	103.4589564	107.0564273	83.57640712	73.3840449
40.26	101.9430984	105.489637	81.43660936	76.41702295
40.28	100.7742694	104.5165932	79.60634139	80.19534736
40.3	99.19987966	104.0397937	77.52542926	84.00549196
40.32	98.84199818	104.2084973	75.99964809	88.83842148
40.34	99.34782283	105.1791415	74.38279199	94.44308727
40.36	100.9824542	106.2713328	73.31563353	100.3413105
40.38	103.1040358	107.2668976	72.70390029	105.8885469
40.4	105.664867	107.6475731	72.17797654	111.0228648
40.42	108.5603681	107.9863495	72.28995551	115.8768197
40.44	112.2604581	108.4194003	72.92835979	120.0818455
40.46	115.9399312	108.3316341	73.56989584	124.242163
40.48	119.0251886	108.0310173	74.22005966	128.0363576
40.5	122.279187	108.801534	75.58933866	131.2254444
40.52	125.0942522	109.3899838	77.22223784	134.1866973
40.54	127.6066437	109.8285095	78.78958439	135.9310588
40.56	129.2066185	109.7954202	80.47023359	137.1059753
40.58	130.3536252	110.3322328	82.32893417	136.9878896
40.6	131.2782182	111.0704813	84.4273243	135.682526
40.62	131.6644464	112.3073051	86.71718475	133.3468389
40.64	131.9057953	113.6828921	88.87086864	130.4413631
40.66	130.4528233	114.5270715	91.29616139	126.6405643
40.68	128.528471	115.5142269	93.72150774	122.2596248
40.7	125.8331014	116.4094792	95.99885732	117.2081515
40.72	123.1233654	117.0314905	98.87811204	111.6215836
40.74	119.377024	117.2403843	100.9187966	106.5930802
40.76	115.6237264	116.9838942	102.7330873	101.6257256

40.78	111.2768622	117.048829	104.0074638	96.90638791
40.8	106.6701163	118.2462858	104.7540398	92.63862878
40.82	102.6842876	119.3721519	104.8603822	88.67991708
40.84	99.54352614	120.4792891	104.6466346	85.12924967
40.86	96.82978056	122.5197047	104.1115967	82.13715543
40.88	94.97066134	125.6034988	103.1677814	79.79681565
40.9	94.33240368	129.3751623	101.5677702	77.75394479
40.92	95.50914754	134.2990282	99.99307008	76.95845687
40.94	97.41190414	140.0609667	98.23942057	76.76346648
40.96	100.6198969	145.2505976	97.16564769	76.75125493
40.98	104.6230236	150.1852988	96.34636869	77.10344726
41	108.9939377	154.8550015	95.86822126	78.45834564
41.02	114.8043473	159.5012883	95.24009506	80.67480028
41.04	121.0549085	164.29441	94.61618465	82.88439377
41.06	127.4166731	168.2097876	93.4038922	85.28184751
41.08	134.4222965	171.6568632	92.28106886	87.78464759
41.1	141.7255759	175.0576722	91.37968551	91.08815452
41.12	148.778375	177.9085792	90.01004551	93.93682273
41.14	154.8873476	179.8337476	88.64328244	96.89551522
41.16	160.7039802	182.1055233	88.04344625	99.93850945
41.18	166.8823723	183.991979	87.52527657	102.4039488
41.2	173.09045	184.8972151	87.34273132	104.8909303
41.22	178.541167	185.3293447	87.08616341	106.6224795
41.24	182.799906	184.9458631	87.31821114	108.5539053
41.26	185.7350288	183.3876206	88.09171908	109.8209809
41.28	188.2561513	181.9131449	89.09137425	110.930719
41.3	189.1028264	179.492703	90.2836303	112.2456072
41.32	188.3510962	175.6476722	91.38838609	113.2057963
41.34	186.0564102	171.0384114	92.54956821	114.3275083
41.36	183.7705804	166.8273051	94.01628779	115.0467085
41.38	179.9553797	162.005945	95.19975326	115.1890717
41.4	175.1698443	157.1300779	96.56716958	115.170724
41.42	169.6264091	152.2101537	97.73830215	115.0259571
41.44	163.2634776	148.1287228	99.15777834	114.6121124
41.46	156.4997229	145.2754889	100.4487006	114.7776216
41.48	149.7770796	143.426128	101.9052088	114.8646931
41.5	143.4386045	141.713419	103.8011528	114.6065224
41.52	137.1472909	140.790093	105.9129305	114.4244979
41.54	130.9734867	139.683336	108.0728749	114.1160997
41.56	125.5776924	138.1974355	110.307299	114.0049358
41.58	121.0415816	136.6570887	112.0764152	113.6215017
41.6	116.705043	135.0161695	113.6456578	113.3629386
41.62	113.7911801	133.3379664	114.9577723	112.8492871
41.64	110.4672434	131.2392001	116.2976803	111.3613227
41.66	107.8638578	129.5180291	116.9471949	109.7874022
41.68	106.7396714	128.369906	116.8224664	108.1488978
41.7	106.5706593	128.5234533	115.6672656	106.6471605

41.72	106.6477642	129.2572161	113.7940146	103.8394651
41.74	107.7967348	128.9099201	111.2781393	101.2406502
41.76	110.0214076	128.7584771	108.9307433	97.98254727
41.78	112.6010274	128.2745717	105.9644059	94.45147032
41.8	115.1226696	127.6274456	102.9443503	90.47743655
41.82	117.639914	127.053426	99.7111892	86.84719486
41.84	120.5413338	125.787751	96.41687532	83.50635757
41.86	123.9646264	123.8747517	92.66609465	80.05787744
41.88	127.2358985	121.4919618	89.2488381	77.53753463
41.9	129.753424	119.0915199	85.14169279	75.49941248
41.92	132.1455031	116.4552644	81.18059359	73.39098999
41.94	134.7134452	113.6185853	77.22804328	71.62319648
41.96	137.4230043	111.4957256	73.71528466	70.16909799
41.98	138.4722298	108.575045	70.32021741	69.147928
42	138.8347689	105.893787	67.47985236	68.43417838
42.02	139.0451269	104.8165649	65.12501365	68.52035089
42.04	138.9926797	104.5577035	63.48153302	68.82474568
42.06	137.8207989	104.807745	62.48621195	69.90736374
42.08	136.6054343	106.0890474	62.35096976	71.31680554
42.1	135.3799767	107.6004338	62.68342603	73.29615027
42.12	134.5215775	110.1961695	63.15563454	76.1452068
42.14	134.4508171	113.197657	63.92210739	79.863874
42.16	135.0382546	116.4976246	65.14666094	83.61840732
42.18	136.2303833	120.1172201	66.6429639	87.28707655
42.2	137.4818748	124.1648155	68.66378097	91.41458691
42.22	138.5949671	128.8604106	71.01013652	95.19939124
42.24	139.32135	134.1920012	73.04586207	97.98922136
42.26	141.236308	140.9893043	74.4875852	100.1349732
42.28	143.0068207	148.1581181	75.9589372	101.7936596
42.3	144.7628921	155.606935	77.29995854	102.6147588
42.32	146.0167105	162.4892719	78.61770755	101.8545647
42.34	148.0878289	168.8062767	79.56503388	101.0612843
42.36	150.1321074	175.3920811	80.64038932	99.8288563
42.38	152.1639246	181.8772727	81.4706937	98.43174638
42.4	154.6458873	187.0841743	82.18283143	96.3976398
42.42	157.4745434	190.661982	82.88340682	94.63255031
42.44	160.2922712	193.4600708	83.4294236	92.19553747
42.46	163.3185509	195.3261129	83.59016281	89.72471534
42.48	165.9553342	196.4485004	83.65787137	87.76968248
42.5	168.9002912	196.9076196	83.01797249	85.52501871
42.52	172.2683517	195.5560866	82.55459602	82.75077258
42.54	175.8256699	193.0869623	81.94813732	79.91259177
42.56	178.3581869	189.3329235	81.60697138	77.15572656
42.58	179.9221236	184.8423754	81.0492254	74.30825766
42.6	181.1303651	179.5464536	80.91021438	71.13756093
42.62	181.7571413	174.195949	80.55972394	68.43738497
42.64	181.0386571	168.3236182	80.48148751	66.28446152

42.66	179.280633	162.1486621	80.39621296	64.90190515
42.68	178.7295328	156.0352685	80.3345677	64.04081909
42.7	178.1029548	149.9585256	80.07270705	63.84028415
42.72	177.342613	143.7869158	79.9923511	64.11356153
42.74	176.4291334	137.3781606	80.07943675	64.8232521
42.76	175.2308555	130.9395692	79.97513095	65.80016887
42.78	173.9236798	125.0000961	79.68956012	67.16266761
42.8	172.1370988	119.4901224	79.40569825	68.94430175
42.82	170.0017403	114.6918172	79.24769946	70.50326423
42.84	167.5819476	110.7702609	78.87801699	71.73967843
42.86	164.8539266	107.3815866	78.89320457	72.92351704
42.88	161.0885054	104.1068895	79.0061078	74.08922945
42.9	157.0984862	100.7027647	78.76086763	74.86654667
42.92	153.348107	97.68553645	78.0100627	75.32023764
42.94	149.9482132	94.92494084	77.4605046	76.57818384
42.96	146.3143735	92.23430478	77.33126403	78.07304277
42.98	143.200809	90.38925169	77.13510668	79.52370816
43	140.9296147	88.64850945	76.81095055	81.00875316
43.02	138.8082	87.58744059	76.67499343	83.18171099
43.04	137.2434331	87.40194357	76.65706644	85.25891698
43.06	136.5729861	87.62112549	76.75864799	87.15613914
43.08	135.6500728	88.08261604	76.94444029	88.72213874
43.1	134.9972899	89.22387097	77.25428456	89.79975832
43.12	134.4973283	91.04918495	77.56828597	90.32293558
43.14	134.3231014	93.76753362	78.19513601	90.77199818
43.16	133.8293751	96.84323289	78.70543432	91.18692284
43.18	133.7649611	100.2010294	79.52856912	91.00629083
43.2	134.3380959	103.1509708	80.46208413	90.24690363
43.22	134.5699262	106.5411781	81.25756396	89.55047224
43.24	133.7138164	110.1926636	81.94625442	88.78245222
43.26	132.6958863	114.2482556	82.55117605	88.07118819
43.28	132.0140318	118.8993771	83.16030539	86.84501163
43.3	130.5260754	123.7714036	83.29207503	85.70080291
43.32	128.6102083	128.2224947	83.42562746	84.72477298
43.34	126.7057417	132.5336879	82.97385681	82.88579128
43.36	124.841896	136.9565649	81.86645364	80.46320457
43.38	122.4755021	141.3178026	80.77431591	77.64492972
43.4	119.6962322	145.3012559	79.68672667	74.73665285
43.42	116.6041066	149.170448	78.67536151	71.58415613
43.44	113.2489443	152.4888421	77.56523208	68.08861361
43.46	110.0925382	154.5218991	76.33328547	64.55257761
43.48	106.8918212	155.4381222	75.08482657	61.44572151
43.5	104.2493791	155.8938993	73.91156841	58.54212559
43.52	102.037751	155.6765548	72.3016756	56.07706138
43.54	99.87010517	154.6105319	71.24892608	53.78803822
43.56	98.26839418	153.3801122	69.67734048	51.90112853
43.58	97.67968248	151.9095055	68.27882698	50.31708868

43.6	97.48294974	151.0318212	67.181261	48.96575994
43.62	97.28197796	149.8248761	66.5164597	48.06966528
43.64	98.1230539	148.7578673	66.17688341	47.28988877
43.66	99.66375973	147.9133714	65.92573061	46.97545657
43.68	101.3892001	146.6478572	65.87215896	47.41696734
43.7	103.1803448	145.9654141	66.48511174	48.63156841
43.72	105.3528152	145.509554	67.48665689	49.92361311
43.74	108.0699687	145.5030397	69.04011932	51.80568612
43.76	110.6609425	145.5225351	70.66753463	54.36459703
43.78	113.9038619	145.4469117	73.05380524	57.07237132
43.8	118.3465204	145.0436758	75.60336232	60.18461624
43.82	122.4591132	144.2352796	78.05906158	63.86415512
43.84	126.2146375	143.217293	80.18926181	67.73774598
43.86	129.9133047	141.9935524	82.55653959	71.70129437
43.88	133.7046678	140.4097563	84.56479422	75.05101931
43.9	137.1586783	138.6519618	85.83226514	78.62737385
43.92	139.6948893	136.8621135	86.73367378	82.16961573
43.94	141.7103721	135.1756568	87.31656386	84.47521691
43.96	143.6322419	133.7162878	87.64562039	86.26114572
43.98	144.849732	131.9046102	87.77960866	88.13222672
44	145.7926251	129.8336323	87.4301618	89.49997371
44.02	146.4481899	127.6018192	86.7131439	89.86688543
44.04	147.2668045	124.54703	85.88621094	90.17794519
44.06	147.706125	120.6262837	85.22871372	90.54812721
44.08	147.689013	116.5284953	84.26939023	90.86515826
44.1	147.2712256	112.4745455	82.98630701	90.55309637
44.12	146.1146496	107.5734604	81.24081909	89.35673577
44.14	144.6284983	102.8257286	79.19501466	87.64332996
44.16	142.99568	98.97231672	77.03930933	85.88156133
44.18	140.9061351	95.28445647	74.66569522	83.46815856
44.2	138.6523855	92.2659096	71.97737891	81.05726666
44.22	136.7518698	89.34136313	69.56915361	78.30801294
44.24	135.052789	87.12897866	67.07711498	75.8979998
44.26	133.3273678	85.17882496	64.90464051	73.30796542
44.28	130.9400981	84.02276064	63.05213368	70.85845788
44.3	128.1728264	83.44611892	61.4363333	68.7725493
44.32	126.2200496	83.79666094	60.14543331	67.17577611
44.34	124.4718677	84.76894428	59.35586915	66.23909293
44.36	123.2326029	85.99117808	59.19060168	65.59325311
44.38	122.7559409	87.16515623	59.95258065	65.17257458
44.4	122.3332379	87.84827182	60.83020427	65.24386793
44.42	121.7889888	88.60085145	61.86295278	65.52776014
44.44	120.8925068	89.54811912	63.36748812	65.91813935
44.46	119.6952462	90.20496612	65.05026797	66.26301547
44.48	119.2447922	91.42158054	66.54709273	66.75588836
44.5	118.1229326	92.59472646	67.911982	67.47842653
44.52	116.1820801	94.0433067	69.72579533	68.21277278

44.54	114.753782	95.51508646	71.65358681	68.45803721
44.56	113.4594823	96.68462736	73.49517646	68.49559915
44.58	112.3535079	98.13216301	74.87192234	69.02355041
44.6	111.040177	99.17919001	76.55729497	69.19124178
44.62	109.433601	99.59796238	78.53980079	69.09735464
44.64	108.5133573	99.37098696	81.01256952	69.90295985
44.66	107.0650399	98.56879361	83.69057438	70.99052887
44.68	105.4935261	97.52226919	85.22093336	71.89053696
44.7	104.0586824	95.85427344	86.80761149	72.77797249
44.72	103.4389018	93.52346344	87.88272424	73.92656588
44.74	103.0542542	91.6999636	88.46910608	75.2976216
44.76	102.849192	90.25444029	88.75820407	76.52598342
44.78	103.5472758	88.44660835	88.62505713	77.50989079
44.8	104.5872424	86.60699869	88.45563758	78.39232885
44.82	106.4865204	85.40801294	87.97922136	79.08580241
44.84	108.3675296	84.3404864	87.37968146	80.34445748
44.86	110.881714	83.09774497	86.42981697	81.44621398
44.88	113.5764395	82.40109617	85.6319102	83.03286278
44.9	116.9131075	82.45062898	85.29874406	84.41902417
44.92	120.5937729	83.42972596	85.27045101	85.83063606
44.94	124.4637284	84.55920316	85.7622075	86.88296693
44.96	128.4885266	86.10139043	86.54951158	87.86514612
44.98	132.4319618	87.75362625	87.38485995	89.3266215
45	137.1538548	89.39099504	88.3104773	90.58818384
45.02	142.240269	91.07887754	89.49160987	90.88714632
45.04	147.1758277	93.09943675	90.82554556	90.8302346
45.06	151.9611811	95.36683689	92.00270806	90.48165436
45.08	156.0833694	98.58187178	92.69426737	89.75738598
45.1	159.5694236	102.1615917	93.20724441	88.47733947
45.12	162.2545475	107.0871514	93.73419254	86.93868541
45.14	164.8817565	112.3417292	93.51512792	85.00355041
45.16	166.9517191	117.4321944	93.29004551	82.77765902
45.18	168.0746941	122.3256608	92.7109546	80.6176307
45.2	167.6921337	126.6925837	92.61269188	78.19729599
45.22	166.9638143	130.8323562	91.76350288	75.81276772
45.24	165.6823744	134.1853039	90.52834867	73.71018708
45.26	163.6311841	137.2927869	88.5557205	71.67250177
45.28	161.9027758	139.3762514	86.06529174	69.73747194
45.3	159.6526231	140.6341116	83.39316311	68.09464557
45.32	157.8718738	141.304779	80.33246638	66.60135403
45.34	155.4613864	141.8715421	76.82790272	64.722342
45.36	152.8931934	141.8625897	72.6857114	62.86478208
45.38	150.6457862	141.15315	68.9930539	60.88734452
45.4	147.8398979	140.3806866	65.10999899	59.04252806
45.42	144.6696966	140.1814632	61.76185459	57.30751542
45.44	141.3590353	139.0880231	59.05885934	55.72447164
45.46	138.8918728	136.9404945	56.12456062	53.93222773

45.48	136.1119951	134.988919	53.89792901	52.27303772
45.5	134.0001375	133.4347558	51.90480635	50.58372839
45.52	131.6407008	131.4232288	50.35026393	49.54867226
45.54	130.1465194	129.1391556	49.48857822	48.52799575
45.56	128.6061786	126.4060633	49.05877541	47.66266255
45.58	127.9889402	123.5335009	49.05293255	47.20230964
45.6	127.6544089	119.9384417	49.61334513	46.31942562
45.62	126.9021185	115.8587784	50.8255041	45.44085651
45.64	126.8260309	112.0940864	52.3228557	45.12932147
45.66	126.7677419	108.7185287	53.77400243	45.07292446
45.68	126.8542421	105.2063687	55.31521792	44.74786429
45.7	127.0533269	102.2346931	57.04985944	44.49480736
45.72	126.5895207	100.1098584	58.91658004	45.08378602
45.74	126.4425645	98.04119426	60.66858125	46.22319244
45.76	126.1447366	95.79028314	62.42732834	47.92631914
45.78	125.6359399	93.94137122	63.9669279	50.12978562
45.8	124.7178936	93.0100991	65.62839721	52.29930731
45.82	124.191622	92.12343715	66.3552705	54.66747801
45.84	123.242428	91.16804025	67.0284326	57.13250379
45.86	123.1185155	91.09509152	67.35816159	59.81097381
45.88	122.4517049	90.98159875	67.71776317	62.65693296
45.9	121.6124775	91.59879765	67.42503893	65.33035191
45.92	121.146033	93.44523208	67.0596036	67.61245121
45.94	120.3674729	95.72570027	66.45788452	69.98246031
45.96	119.9672576	98.54798058	66.11266053	72.36820609
45.98	119.0969683	101.7335898	65.97428051	74.16452119
46	118.2038952	105.4375447	65.73356052	75.68030842
46.02	117.2571726	109.7163596	65.8223784	76.76321974
46.04	116.5185186	113.3918172	65.60757003	77.88178077
46.06	115.993422	117.3450177	65.09502478	78.51929821
46.08	115.5081191	121.6544656	64.74511882	79.3952796
46.1	116.0059915	125.8043584	64.58979371	80.01424209
46.12	116.7578532	128.7686136	64.5438467	80.45133482
46.14	118.2833633	130.9675488	64.18570937	80.12941248
46.16	119.9062868	132.7739994	64.01641723	79.84446355
46.18	121.9363242	133.8200667	64.00391546	79.08597634
46.2	123.5104267	133.8330509	64.38226919	77.6600809
46.22	126.1237152	132.6003226	65.06968753	75.84572859
46.24	128.7213338	130.1100981	65.76679846	73.9379553
46.26	130.9225402	126.9859773	66.67972798	72.03529174
46.28	132.8695227	123.1344939	67.90164627	69.85929315
46.3	134.0771403	119.0787774	69.01035797	68.01690262
46.32	135.2239478	114.6248428	70.19422591	66.85473253
46.34	135.5966003	109.5363293	71.12307817	65.78871069
46.36	135.5748053	103.8670654	71.98767823	64.64635352
46.38	135.0275923	98.70751542	72.67373243	63.0883153
46.4	133.8020103	93.49794823	73.26462837	61.41661543

46.42	133.6346526	88.2865042	73.27889069	59.9029103
46.44	132.9358378	83.30096673	72.95169481	57.88387602
46.46	131.6577258	79.06729599	72.45911113	55.61647386
46.48	129.1177622	75.39706846	72.06406512	53.0635949
46.5	126.6308697	72.89240874	71.27455051	50.56074022
46.52	123.7749247	71.11308525	70.38393063	48.45477096
46.54	120.4829073	69.49328648	69.57410355	46.77680352
46.56	116.4286419	69.08201031	69.08106785	45.30423804
46.58	112.249998	69.04983214	68.31916978	44.15232885
46.6	108.5672515	69.85535241	67.65584387	43.39952978
46.62	104.7508636	70.61936596	66.99985135	43.754775
46.64	100.7890596	72.16154414	66.22789463	44.39681262
46.66	97.46767014	74.14384063	65.30923147	45.04173526
46.68	94.23444737	76.91542724	64.05997674	46.06193144
46.7	91.25908181	80.10754576	62.94329659	47.52609465
46.72	88.81678127	83.59077864	61.43133684	49.45893012
46.74	86.53680453	88.21680756	59.69963596	51.38268581
46.76	84.50744261	93.52676914	58.5285408	53.526126
46.78	82.97375063	98.54863889	57.50168773	55.28783901
46.8	81.60859238	103.5715876	56.38235211	56.80901507
46.82	80.480631	107.8809445	55.0055769	58.38184751
46.84	79.26819699	112.4778785	54.10402467	60.93901911
46.86	78.79620083	117.5952513	53.87641116	63.9072434
46.88	78.13037719	122.3362736	53.75959551	67.38130145
46.9	77.833784	126.5372636	54.15775306	71.50854788
46.92	77.86134695	130.925495	54.94811305	75.93307109
46.94	78.16193346	135.5050602	55.76890484	80.30238851
46.96	79.03039842	140.5491971	56.63531904	84.29933664
46.98	80.34371119	145.3312398	57.56676408	88.04717363
47	82.73563454	149.8076135	59.31403782	92.19026899
47.02	85.9013419	154.2042846	61.15411771	95.88228941
47.04	89.25912529	157.916394	63.42844373	99.23232986
47.06	93.15971787	161.6632066	66.19623824	102.8671372
47.08	97.97672363	165.3776742	69.95321367	106.7533957
47.1	104.2372272	169.6938629	74.00300435	111.197566
47.12	110.5609981	173.4315492	79.15589443	115.8161432
47.14	117.7960845	177.3122803	85.24317525	120.9545111
47.16	125.7769734	181.4055921	92.02292547	126.500179
47.18	135.5483466	184.9141167	99.21296896	132.3511083
47.2	146.1673698	187.982707	106.5122793	138.3752068
47.22	157.1556416	190.892706	114.799821	144.5096673
47.24	169.0909192	194.8511841	123.3185398	150.0626312
47.26	181.2483274	198.6371959	131.3880979	155.365408
47.28	192.9513702	202.6761098	139.1949489	160.3169623
47.3	204.4526383	206.7168591	146.7094216	165.4873021
47.32	215.5336465	210.6721933	153.5042937	169.5318809
47.34	226.0543857	214.6531136	159.4985175	172.8207594

47.36	235.6820639	218.4076813	164.6146253	175.7501507
47.38	244.2981424	221.5259652	168.7754394	178.4359409
47.4	251.3579735	225.0281262	171.7541602	180.2563646
47.42	256.9925665	227.7714986	174.1512772	181.5407665
47.44	261.4111811	230.0001395	176.2656204	182.5000182
47.46	264.6005329	230.8708322	177.2961422	182.6544464
47.48	265.2434948	230.5995176	176.9019244	182.0397988
47.5	264.3844322	229.751618	175.7450986	180.9539104
47.52	262.0627859	228.574685	173.612702	179.3415674
47.54	258.4275801	226.0417171	170.3610062	176.9810638
47.56	253.4594499	222.477565	165.7435302	173.4847699
47.58	248.0308424	217.3563434	160.7674497	169.1174254
47.6	241.9567014	211.236032	154.906761	164.1703438
47.62	234.4982142	203.7177065	147.9997169	158.2257367
47.64	226.5148731	195.3772363	140.7467034	151.7599464
47.66	218.0018687	186.3371554	133.3862211	145.1387795
47.68	209.0291223	177.0828375	126.4444464	138.5500526
47.7	199.8612994	167.6298726	119.4042997	131.8621539
47.72	190.7839236	157.9266154	112.929097	125.437751
47.74	182.8321529	149.1273698	106.535405	119.2907513
47.76	175.3880402	140.6398331	100.8896218	113.1777237
47.78	169.5419153	132.5240853	95.29691374	107.4736364
47.8	164.3040742	124.954689	90.65587623	101.9095176
47.82	159.7052159	118.3300131	86.77484377	96.21267975
47.84	155.57405	112.0037021	82.74010719	90.30611791
47.86	151.3256689	106.2784437	78.82250177	84.25493579
47.88	147.0025958	101.504689	75.40824249	78.40441602
47.9	143.0932875	97.66295581	72.29030943	73.08054707
47.92	139.4555122	94.26393366	69.01810699	67.82076853
47.94	135.521623	91.21827991	65.86451916	63.4394772
47.96	131.2642734	88.37651229	63.4054778	59.92991809
47.98	127.1580767	86.44605622	61.63217616	56.78983719
48	122.9682799	85.22012843	60.05042977	53.72876226
48.02	118.5846264	83.83263121	58.82985944	51.48274547
48.04	114.0080301	82.63579533	57.96430579	49.96966326
48.06	108.8123218	81.42746284	57.32395389	49.22038123
48.08	102.9176135	80.69714228	57.31451613	48.77049146
48.1	97.378649	79.89135403	57.98290424	48.93326322
48.12	91.62405299	79.30958641	58.95227829	49.03442714
48.14	85.75908383	78.14566893	59.96321367	49.13408231
48.16	79.91137729	77.29884114	60.74902417	49.1441531
48.18	74.26464759	76.65341389	61.72134392	49.28953281
48.2	68.51360198	75.98231773	62.70832339	49.61472646
48.22	63.19007281	75.05666599	63.86418748	50.01820305
48.24	58.77125088	74.57752351	65.02510264	50.17013652
48.26	54.94182627	73.51309334	66.45394378	50.79620386
48.28	51.69533927	72.94397614	67.87024573	51.50064112

48.3	49.44504095	72.96280918	69.15907675	51.81639397
48.32	48.41637982	73.95930023	70.05031651	52.19533623
48.34	48.17259885	75.51466984	70.77172616	52.6535049
48.36	49.06233492	77.33751239	71.70092123	53.49619274
48.38	51.33512489	79.74388209	72.16077763	54.16891293
48.4	53.97115583	82.28882698	72.60031146	54.46157953
48.42	57.53722722	84.55955809	72.40886338	54.4110901
48.44	61.36332592	86.84932754	72.12786733	54.26685206
48.46	65.66605218	89.93818081	71.79038123	54.30558904
48.48	69.92799474	92.9417929	71.56235818	54.33972394
48.5	74.43566488	95.36273738	70.69202144	54.52604712
48.52	78.58510163	97.82018101	69.32873395	54.85113459
48.54	82.74843766	99.94388209	68.6426039	56.14042067
48.56	87.22997472	101.534776	68.31914956	58.02099707
48.58	92.1166579	103.1156184	67.81027	60.13174436
48.6	95.90645667	104.0582617	67.68299221	62.57671554
48.62	98.81349378	104.619822	68.14795025	65.41370108
48.64	101.2612721	104.5752139	69.15422591	68.25347861
48.66	102.7329447	104.3999333	70.41501264	71.20654465
48.68	103.6413591	103.8633128	72.00523612	74.10279806
48.7	103.3022217	102.3615775	73.43189605	77.18787744
48.72	101.9298969	101.1144312	74.9207928	80.39182425
48.74	99.79797249	99.68018202	76.58670948	83.83342401
48.76	97.15661745	98.29359996	78.32671959	86.5421893
48.78	94.39242896	97.09846193	80.38383557	89.03070482
48.8	91.78064213	95.11210436	82.71855092	90.99284761
48.82	89.50114268	92.76208413	84.53005157	92.68103145
48.84	87.14862473	91.03941956	86.12685509	93.44387906
48.86	84.6355496	89.37330974	87.44738295	94.0520629
48.88	82.27622813	88.1455314	88.65358782	94.09487006
48.9	80.30501062	87.06277885	89.22311053	93.7672161
48.92	78.69490343	86.1350723	89.05816968	93.213874
48.94	77.2907301	85.64315805	88.51948124	92.46229952
48.96	76.39952675	86.12401861	87.62259581	90.90840732
48.98	75.89798564	87.23072606	85.91837901	88.91327536
49	75.11610375	88.08752958	83.6459005	86.72807463
49.02	74.92937911	89.30718981	81.690811	84.46511477
49.04	74.79714127	91.03523106	79.58668419	81.97591971
49.06	74.98859035	93.20578623	77.25155729	79.24042977
49.08	75.76335322	95.13289514	74.69560825	76.72945394
49.1	77.02500253	96.88294165	71.87023562	74.72369501
49.12	78.54230155	99.64477905	69.4766761	72.93266559
49.14	80.72436748	101.7545728	67.55858429	71.64421074
49.16	83.11130246	103.32432	65.41386692	70.0946213
49.18	85.6924684	104.9383183	63.47632723	68.91637678
49.2	87.75176256	106.5635373	62.37099201	68.12987461
49.22	90.68929113	107.7286935	61.47875619	67.83619072

49.24	93.57048842	108.578646	60.46436647	67.50597431
49.26	95.80433613	109.8158904	59.41561331	67.49582769
49.28	96.65222368	110.3988654	58.49473658	67.87566893
49.3	97.03741733	110.5323915	57.61309738	68.89287087
49.32	97.19223481	111.3088775	57.23766306	69.95890282
49.34	96.63685509	112.6567833	57.22750834	71.17801699
49.36	96.26652745	113.2248862	57.64440489	71.8964324
49.38	95.96509859	113.2509849	58.13421175	73.0442704
49.4	96.01445141	112.8681586	58.99230458	74.11298716
49.42	96.1336212	112.3779472	59.94741329	74.79489028
49.44	96.31569016	111.7265072	61.0634321	74.75640206
49.46	96.67213975	111.3243533	62.15838305	74.63292547
49.48	97.38267064	110.2493902	63.26187178	74.01643139
49.5	98.37413186	109.6178147	63.82705835	73.47459804
49.52	98.97311255	109.2946951	64.4997745	72.46603195
49.54	99.01437961	109.1522631	64.85917585	71.48989787
49.56	98.76080696	109.003874	65.2741622	69.9715856
49.58	98.10894934	108.8787097	65.52591364	68.75028921
49.6	97.29626353	108.5828759	65.74507129	67.20626454
49.62	96.55248155	109.1252836	66.41591465	65.25383052
49.64	95.85789766	109.6845353	66.87667914	62.96637375
49.66	95.23223683	109.8010699	67.49969562	60.92749419
49.68	94.39943371	109.3214056	68.19527253	59.17287188
49.7	93.7061351	109.1620649	69.48500657	57.48157245
49.72	92.88667813	108.9346355	70.4252341	55.86428051
49.74	92.59442613	107.908111	71.23045808	54.8176398
49.76	92.71861867	106.4057984	71.35235211	54.32162807
49.78	92.64292547	104.7878147	71.62894833	54.26957023
49.8	93.14646274	103.405585	71.7864051	54.49399636
49.82	93.83517848	101.3626312	71.31873294	55.12445343
49.84	93.64009809	99.68331075	70.55245829	55.99197391
49.86	93.44910001	98.15630701	69.81317221	57.83468399
49.88	92.95485186	96.47578117	69.04237739	60.07870462
49.9	93.0817211	95.50625544	67.96579735	62.88776216
49.92	92.10726666	95.06351906	66.79518859	65.80975629
49.94	90.44584387	94.77371726	65.83869451	68.96536151
49.96	89.04968753	93.82503792	65.0004237	72.13918192
49.98	88.34591263	93.1114147	64.33778238	75.97425119
50	88.31653858	93.12990596	64.32081707	79.25924158
50.02	88.58693801	93.18362018	64.20118313	82.36605926
50.04	89.2719011	93.18742542	64.52851451	85.2911983
50.06	90.06589544	94.1195945	65.09918394	88.32853878
50.08	90.87074932	95.0007837	65.54850541	90.90140864
50.1	91.33634847	96.41870563	65.87614319	93.37683689
50.12	91.26313581	98.10703913	66.18977146	95.4026757
50.14	91.33924158	100.3802933	66.32379209	97.20634746
50.16	91.48949439	102.6672808	66.57322277	98.644685

50.18	91.35213874	104.9686187	66.70291738	100.3000101
50.2	90.63006472	106.8124815	67.10178785	101.2804257
50.22	89.51830215	108.3414268	67.69927596	101.8779654
50.24	88.95883608	109.2107837	68.59757407	102.057387
50.26	88.26981292	109.5691121	69.6464597	102.7582789
50.28	87.8805855	109.9601476	70.79810699	103.1441248
50.3	87.6649914	110.5284275	72.03250986	103.2765062
50.32	87.32384569	110.1174032	72.36573971	103.3253494
50.34	87.23522196	109.3681778	72.28715239	103.7942664
50.36	87.24701588	107.5491041	71.69640105	104.2742937
50.38	87.65320558	106.0901891	71.08969461	104.6145333
50.4	88.7138467	104.2529427	69.39950551	105.0421529
50.42	90.4382789	101.84333	67.38534028	105.60667
50.44	92.56517545	99.84966832	65.15613004	106.180266
50.46	95.16900597	98.2307928	63.10461725	106.6952695
50.48	97.68568106	97.15130954	60.73292345	107.0557276
50.5	100.0144797	96.43703307	58.31426737	107.2728082
50.52	102.2402467	96.17710183	56.07707554	107.3006563
50.54	104.8429022	96.72643746	54.18976742	107.5157377
50.56	107.7142775	97.92586814	52.53390939	107.296399
50.58	110.9518	99.87170998	51.35583375	107.0449712
50.6	113.9746981	101.7870068	50.76644757	106.1506836
50.62	116.9837314	103.7715391	50.75186874	105.2003549
50.64	119.5764921	106.2244646	51.02685509	103.890987
50.66	121.8632349	109.2764789	51.53461523	102.8088644
50.68	123.4539165	112.6525523	52.28731823	100.9870846
50.7	124.2403549	115.9786905	53.7350359	99.47038932
50.72	124.5706533	119.3340469	55.9015401	97.81272323
50.74	124.1834018	122.5664122	58.59875518	95.86542825
50.76	122.8675063	124.9373759	61.43079684	93.96013753
50.78	120.9875144	126.7909243	65.14964607	91.84884215
50.8	118.9012479	129.1439589	69.60863384	89.45594701
50.82	117.4185883	130.9124401	74.28452017	87.07711902
50.84	116.211805	132.2190707	79.43623723	84.46321772
50.86	114.7867884	133.0534827	84.65887147	82.31382749
50.88	113.0217302	133.8686632	89.7991263	79.38114066
50.9	110.9281828	134.3564395	94.72140864	76.62294873
50.92	109.2085833	134.5163586	99.24689554	74.17162099
50.94	107.6446901	134.5252877	103.161983	72.37278188
50.96	106.1184356	134.5269441	106.631077	70.67073516
50.98	104.7271726	134.6220305	108.9031823	69.27529376
51	103.9390919	134.1828476	109.8576226	67.96252503
51.02	103.9490181	133.992789	110.3843462	66.77447265
51.04	104.8715269	133.7146567	110.6084488	65.66786328
51.06	106.0935191	133.8330984	110.2749621	64.73479017
51.08	107.4105835	133.9300485	108.9509586	64.20896653
51.1	109.5399201	134.1355425	107.2941642	64.0149277

51.12	111.5194752	135.1669127	105.2157235	64.7189463
51.14	113.3825068	136.5792406	102.7974649	66.00040146
51.16	115.4233057	137.7697796	99.93217413	67.44718981
51.18	117.9631156	138.8886895	96.93145515	69.26156032
51.2	119.8243402	139.6073081	93.6626393	71.50420467
51.22	120.6134422	140.3952907	90.15581252	74.34107594
51.24	120.4429872	140.7114066	86.32670644	77.13562645
51.26	119.9719628	140.3399413	82.8960269	79.99089291
51.28	118.426214	139.2071463	79.80313277	82.61576095
51.3	116.2845657	137.5184023	76.7880807	85.55877136
51.32	114.0152958	135.2705865	73.54271008	88.56575892
51.34	111.7985964	132.3894054	70.74317727	91.70036101
51.36	109.9530761	129.3438962	68.2648195	94.96569016
51.38	109.0521337	125.4493609	66.75562039	98.21225099
51.4	108.3975599	121.6202184	65.20485287	101.2950683
51.42	108.2301547	116.3465659	63.98625746	103.6795814
51.44	108.1561199	110.4169431	63.09565578	105.6894145
51.46	108.3297047	104.4716716	62.61200728	107.2688239
51.48	108.6924532	99.00765598	62.07779654	108.415313
51.5	109.8410729	93.84416625	61.57427647	109.4204247
51.52	111.2024108	89.18205279	61.50593589	109.8381889
51.54	112.7601416	84.96641015	61.37136616	110.1883648
51.56	114.074237	81.40447265	61.1386217	109.9995449
51.58	116.2722662	78.02938922	60.79894327	109.7043088
51.6	119.7869127	75.40427748	60.62514511	108.9572677
51.62	123.859277	73.73605622	60.88110628	108.5012003
51.64	128.7779684	72.77744261	61.34803418	108.064141
51.66	133.7131045	72.78442209	61.64592375	107.4836495
51.68	138.759457	73.7315138	62.16089089	106.6316473
51.7	143.8650066	75.2505582	63.46186672	105.6849884
51.72	148.3153221	77.64712812	64.71292547	105.1145222
51.74	152.5157609	80.4121529	65.67121145	104.1692183
51.76	156.102699	83.93349884	66.618829	103.3000374
51.78	158.9987451	87.45745374	67.84833856	102.028194
51.8	159.7908181	91.19692689	68.96166953	100.6821175
51.82	159.6272646	94.70801294	70.08151077	98.88289311
51.84	158.9861887	98.33045101	71.18861159	96.30090909
51.86	157.3960967	102.2301385	72.21703509	93.59312468
51.88	154.321264	106.0966569	72.90489129	90.99869249
51.9	151.1741501	110.1263353	73.13295581	88.21435231
51.92	147.7303357	113.7473799	73.49294266	85.23709172
51.94	144.4489746	117.0711022	74.1627657	82.36328142
51.96	140.5929123	120.1705349	74.27143998	79.49201234
51.98	137.0348225	122.3957579	73.93607341	76.71986753
52	133.4216544	124.6084124	73.15976742	73.92797452
52.02	129.8566539	125.580718	72.45567196	70.94084134
52.04	125.8486733	125.7466266	71.10497017	68.61212458

52.06	122.0673617	124.8861209	69.7110446	65.91742037
52.08	118.0243634	123.660361	67.85248053	63.5176934
52.1	114.4667671	121.5576317	66.18143796	60.99578724
52.12	110.5056457	119.6422945	64.53067348	58.97627263
52.14	106.9731115	118.3453302	62.70505815	57.39236728
52.16	104.2255941	117.5268986	61.05488624	56.05866518
52.18	102.5026464	117.2676418	59.75925169	55.43417737
52.2	101.8119567	116.9375801	58.72900091	55.07108707
52.22	101.3850612	117.2911326	57.7938558	55.36412074
52.24	101.1680675	118.0797118	56.95415108	55.79466073
52.26	101.8112984	118.9213682	56.7349732	56.50501669
52.28	102.3582779	120.236846	57.15562645	57.54804227
52.3	103.2013682	121.4462413	58.05448579	59.04103246
52.32	104.4290039	122.5267176	58.70523309	60.92439579
52.34	104.979185	123.7562767	59.97142987	62.46746082
52.36	105.4042815	125.2585378	61.66443119	63.88103246
52.38	105.733963	126.3139438	63.56190414	64.98403479
52.4	105.7618192	128.2309637	64.92851856	65.79848013
52.42	106.2705076	130.7813803	66.36609465	65.75726363
52.44	106.4026464	133.6986793	67.76563859	65.39521185
52.46	106.3387501	135.971985	68.94819901	64.36825058
52.48	106.5470654	138.1937436	69.92446961	62.90764991
52.5	107.5739964	140.4574477	71.10602892	61.19797957
52.52	108.7684852	143.1339832	72.16868541	59.42661139
52.54	109.9693194	144.9752756	72.97882091	57.88539286
52.56	110.9615441	146.2791728	73.48247952	56.13741733
52.58	112.2321094	147.2096339	73.70867631	54.38038224
52.6	112.9295753	147.7994105	73.92403276	52.58304884
52.62	112.6896744	146.9631206	73.61304682	50.82395187
52.64	112.0934705	145.1293043	72.66046617	48.99293457
52.66	111.6729932	142.693061	71.89025685	47.08780868
52.68	110.4437152	139.9412155	71.17907675	45.92149358
52.7	108.8378046	136.6824249	70.4752796	45.1286035
52.72	106.7130832	133.8198139	69.43586409	44.90857721
52.74	105.47252	131.3677733	68.49647689	44.41824856
52.76	104.0139215	129.0441096	67.17887552	44.57565578
52.78	102.5802002	127.0441976	66.0351077	45.24164021
52.8	100.7313328	124.9431176	64.42519972	46.2471888
52.82	98.31981899	123.5347164	62.64766407	47.65449287
52.84	96.25430074	122.535585	60.95339367	49.55498635
52.86	94.28879058	121.2005248	59.53626049	51.89412681
52.88	91.82600566	119.6267388	58.12897664	54.55319648
52.9	88.84560218	117.9959976	56.73937102	57.48770452
52.92	86.07837193	116.2941652	55.34768025	60.62237739
52.94	83.18000809	114.3586116	54.23548084	63.68183032
52.96	80.56899585	112.5099504	53.28399231	66.78217009
52.98	78.8942977	110.4723086	52.10425726	69.76488219

53	77.16712205	108.8712216	50.96739205	72.38088887
53.02	75.64201537	107.8757336	50.61669127	74.13653757
53.04	74.65955506	106.8600071	50.05695925	75.83889271
53.06	74.68737992	105.5093033	49.67204773	76.79947821
53.08	75.59352715	105.0542532	49.56493983	77.20372232
53.1	76.93751138	104.7651411	49.99994539	77.11444737
53.12	78.89666599	104.1244322	50.35176762	76.74994539
53.14	80.6762251	102.7681444	51.2365588	75.9183153
53.16	83.05327333	101.8191273	52.3579553	74.7185499
53.18	85.41196683	101.5135211	53.65946203	73.35888866
53.2	87.87780261	101.6192578	55.03453332	71.59588128
53.22	90.50009303	100.838107	56.66476085	69.71878552
53.24	93.42668521	100.5534473	58.88281424	67.74374558
53.26	96.1339458	100.1348984	61.53138942	65.84777531
53.28	98.16305693	99.66216604	64.28503691	63.94684195
53.3	100.3396916	98.99733542	66.60527253	61.96141976
53.32	103.0339377	99.28255739	68.93508848	60.3329912
53.34	105.4882931	100.3570937	71.12651633	58.72860957
53.36	107.0235029	101.1150137	73.19051269	57.74859035
53.38	108.7671514	102.4165264	74.9833421	56.33678633
53.4	109.9474578	103.7509768	76.11583881	54.83959956
53.42	111.01207	105.6325311	77.28834159	53.45346547
53.44	111.6593639	107.6289402	78.11463444	52.48875822
53.46	112.127116	109.0898422	79.13456568	51.81132268
53.48	112.1402882	110.5091142	79.13460815	51.51086561
53.5	112.0104611	112.8744403	78.87791485	51.60395591
53.52	112.7404389	115.4956325	78.30067752	52.02262817
53.54	113.0408332	117.3242148	77.52081606	52.97577713
53.56	113.3685782	119.6499606	76.28104358	54.32143796
53.58	114.3741794	122.306576	74.53004045	55.55660127
53.6	114.8519628	125.1723915	72.84159976	57.30422995
53.62	115.9401446	127.9535615	70.98630296	58.87668116
53.64	117.0043665	131.0231914	68.79904338	60.59240671
53.66	117.7766427	133.898561	66.33292244	62.11471332
53.68	118.1515381	137.095944	63.96399231	63.65223582
53.7	118.8416453	140.0721853	61.73790677	65.13231267
53.72	119.6474052	142.8308454	59.35692588	66.73370715
53.74	119.9011154	145.6204945	57.66012135	68.15743553
53.76	119.8278006	148.9334928	56.04005461	69.56274345
53.78	119.5165194	151.8305865	54.7911619	70.92767115
53.8	119.2617029	153.942704	53.41706138	72.26070988
53.82	118.6766286	155.2772474	52.56460006	73.88897158
53.84	117.9919598	156.5296117	51.81668824	75.31269087
53.86	117.1617696	157.6224168	51.14315704	76.52968753
53.88	116.2502366	157.7695985	50.68483466	78.13223683
53.9	115.3593983	156.2402963	50.66180908	79.62023865
53.92	114.4332915	154.4484144	50.97268783	80.80266458

53.94	113.0214289	151.6407008	51.09657903	81.48864698
53.96	111.8534584	148.2683982	51.15687228	82.05370614
53.98	110.4982415	144.8661351	51.37241177	81.77799272
54	108.5643371	141.0442057	52.2392881	81.28258671
54.02	106.5335909	136.8572909	53.03124886	80.04023966
54.04	104.3351492	132.3490252	53.84994337	78.47404389
54.06	102.2144019	128.5835261	54.49478107	76.71747194
54.08	100.0147174	125.5466953	54.71902316	75.23697442
54.1	98.7720002	122.8091627	55.16971787	73.74679846
54.12	98.19706644	119.8199282	55.49698352	72.10170492
54.14	98.11619274	117.1042097	55.68592072	70.68661442
54.16	98.40049044	115.0688502	55.4964233	69.11127819
54.18	98.72504095	113.5811498	55.83047426	67.59704419
54.2	99.35407321	112.5012489	56.48126504	66.33357569
54.22	100.1916281	111.826939	57.20191627	64.93536758
54.24	101.019729	112.2201315	57.93119426	63.47801901
54.26	101.7473506	112.7413287	59.07621701	62.23837901
54.28	102.5488573	113.9505693	60.74011831	61.558378
54.3	104.1874194	116.3286338	62.39060168	60.8544413
54.32	105.509911	119.1711457	64.05196683	60.73929922
54.34	107.1694246	122.1536111	65.91714026	61.38911316
54.36	109.2481616	125.6971605	67.79569016	62.28375367
54.38	112.2519416	128.924951	69.88956416	63.541712
54.4	115.0585378	132.4193073	71.96432197	65.70015876
54.42	117.8242765	135.2521054	74.49561533	68.42600971
54.44	121.0070139	137.4284235	76.89919304	71.24948124
54.46	124.8664981	138.5752806	79.39887248	74.53967439
54.48	128.7700506	138.3728466	81.64456163	78.01673172
54.5	132.676127	137.9951299	83.85452119	81.22426737
54.52	136.6741824	137.2761422	85.62478006	84.31875822
54.54	140.3575569	135.9312175	87.04992618	87.31925978
54.56	143.3497391	133.5968753	88.4188108	90.15723026
54.58	145.5259612	130.5303671	89.68915158	92.13435737
54.6	147.1304722	127.440087	90.48747902	93.92523511
54.62	148.0505906	124.1522166	90.55800182	95.10204166
54.64	148.2468804	121.369013	90.63693093	96.14316513
54.66	147.7876924	118.8751178	90.22191627	96.55600769
54.68	147.9187562	116.1537698	89.26590353	96.86990191
54.7	147.6471433	113.2122257	87.22113358	96.72520983
54.72	146.8312246	110.2277622	84.73572555	96.18883102
54.74	145.5762443	107.539009	81.96472141	95.73395288
54.76	143.8740287	104.3919304	78.97970776	94.47075033
54.78	142.343245	100.6632794	76.06560724	92.66954596
54.8	140.4676277	96.87662757	73.1875943	90.42818283
54.82	138.1934331	93.03817069	70.2102164	87.74839923
54.84	135.4402933	89.44107999	67.61544342	84.75666498
54.86	131.8489352	86.45302255	65.48431388	81.71721711

54.88	128.3102306	84.24428456	63.17775508	78.32854384
54.9	124.8389534	82.71326727	60.87124381	74.96517848
54.92	121.0527869	81.5117929	59.09470725	71.77977753
54.94	117.2322601	80.78090606	57.85917889	68.85303671
54.96	113.4807422	81.3323511	56.62635049	66.04946304
54.98	110.247838	82.10981292	55.61090808	63.82149661
55	107.1103539	82.13985843	54.72990899	62.46768733
55.02	104.8848094	81.93571645	54.21068561	61.45694105
55.04	103.2054252	82.00015472	53.81543735	60.40267267
55.06	102.2706462	82.07448377	53.79120538	59.83679745
55.08	100.7510537	82.75344019	53.67004854	59.71530792
55.1	99.63482455	83.80650925	53.93299525	59.54401052
55.12	99.26225604	85.03870563	53.90356861	59.35237638
55.14	99.11702093	86.20886237	53.8255678	59.44762666
55.16	98.81697947	87.56742441	53.79092021	60.10333097
55.18	98.6789008	89.66321974	53.42429366	60.77812013
55.2	98.44357771	91.97528163	52.87672869	61.87351704
55.22	98.22794924	94.31587218	52.49698352	62.5677662
55.24	98.32738396	97.13822833	51.99307716	63.50939731
55.26	98.86263525	99.87022146	51.22602083	64.71415411
55.28	100.6489493	102.745679	50.12367681	66.37314794
55.3	102.3349105	105.1388624	48.47248761	67.95123976
55.32	104.5048134	107.2492234	47.03432804	69.60317525
55.34	107.1917029	108.9056447	45.39810598	71.28979776
55.36	110.1164142	109.9237769	43.70701992	72.45738598
55.38	112.6294671	110.0001294	42.04222975	73.51219233
55.4	114.8467054	109.977836	40.66161088	74.39799575
55.42	117.4764061	110.130359	40.02862069	75.23404692
55.44	119.5287259	110.3143139	39.73512893	75.46459298
55.46	120.9206249	110.3606452	39.69173425	75.35533016
55.48	121.4533097	110.5695763	40.09027202	75.07053089
55.5	121.7312731	110.8287451	40.59543634	74.40810497
55.52	121.2118232	111.3515037	41.73395288	73.45645667
55.54	120.6198867	112.0075963	43.16995449	72.45802811
55.56	120.150086	112.9353089	44.79511275	71.17428355
55.58	119.2059632	113.2344787	47.35263222	69.81336536
55.6	117.3770927	112.760631	50.14773283	68.29265952
55.62	115.2261108	112.4454212	53.33260491	66.6924502
55.64	112.9516463	112.1432582	56.86789463	65.24336637
55.66	111.0786106	111.0293498	60.80704015	64.17600769
55.68	108.7376742	110.0145232	64.79608353	62.99889979
55.7	106.8049661	109.0257013	69.28211649	61.13848822
55.72	104.6215876	108.2504368	73.61898574	59.38412984
55.74	101.9074365	107.4347952	78.12804025	58.19722318
55.76	98.9824593	107.1196582	82.68736475	57.57368187
55.78	96.60490343	107.2231378	87.16614622	56.6867479
55.8	94.79357872	107.2839498	91.57022651	55.97336434

55.82	93.45013045	107.8529639	95.93315907	55.82064415
55.84	92.70181211	109.2406472	99.74340985	56.14069471
55.86	92.56386996	110.5386965	103.2688988	56.19491556
55.88	93.43242795	112.2302821	106.4383699	56.50863485
55.9	94.83091111	114.1314268	108.9364233	57.60914653
55.92	97.25039539	117.0242026	111.3333684	59.27856103
55.94	100.8452402	119.5859531	113.4183557	61.37997876
55.96	104.9801254	122.4221104	115.0150804	63.81142583
55.98	109.2553453	125.2815603	116.0955051	66.65153099
56	114.6624573	129.2298857	117.2471221	70.0602973
56.02	120.7314814	133.6761614	118.6895439	74.00710486
56.04	127.0759126	138.1732642	119.5023936	77.89692385
56.06	133.5923723	142.4131257	120.4326282	82.42991303
56.08	140.8028992	147.296578	121.548831	86.88339873
56.1	148.717384	152.1670422	122.7991253	91.14964506
56.12	155.6794752	156.937476	123.93586	95.46583881
56.14	162.8688098	161.7029417	125.0762291	99.83926383
56.16	169.7049681	165.5891718	126.365589	104.1355263
56.18	176.3876742	168.6618758	127.1985044	108.1387886
56.2	182.7316766	171.0109081	128.0035686	111.8635433
56.22	189.1076479	172.5240125	128.9056457	115.4356113
56.24	194.6051158	172.8217727	129.8914481	118.4217181
56.26	199.198194	171.1875387	130.7112974	120.7558338
56.28	202.5754424	169.3567246	131.0046617	122.5652776
56.3	204.6949722	166.7380888	131.1862453	123.9896835
56.32	205.6003003	164.1214117	131.2003549	125.1708322
56.34	205.3419436	160.6751997	131.0774507	125.6980595
56.36	203.9773243	156.8751987	130.5570037	125.4204348
56.38	201.4000779	152.4862878	129.6644534	124.0929497
56.4	197.4385873	147.7261007	127.9281029	122.4318748
56.42	192.1071463	143.1653463	125.9681909	120.2796633
56.44	185.911708	138.9183507	123.8349307	117.0909586
56.46	178.3837334	134.6042704	121.4304743	113.0677197
56.48	170.252971	130.7368935	118.8563657	109.453781
56.5	161.9401122	127.1265002	115.8933654	105.8719992
56.52	153.3146162	123.6450662	112.8718576	101.9183911
56.54	144.1420882	120.0400688	109.857929	98.01664071
56.56	134.5608646	117.4538012	106.7691293	94.20941551
56.58	125.2590019	115.8496623	103.7866063	90.55268076
56.6	117.158915	115.3098554	101.5902892	86.77232076
56.62	109.5655971	115.0610375	99.4416665	83.54881788
56.64	102.8221569	115.561172	97.06672363	80.38279199
56.66	97.81236323	116.7167236	95.34547174	77.55302457
56.68	94.13827384	118.6389069	93.92155931	74.9769188
56.7	91.16155526	120.2639357	92.6753696	72.97934574
56.72	89.03331783	122.3479796	91.31717969	71.26568005
56.74	88.51827283	124.1265457	90.64132875	69.97546668

56.76	89.29611892	125.9085357	90.34411265	68.66306401
56.78	90.88616038	127.5489948	90.04120437	67.72687329
56.8	92.83879563	129.1267085	90.52367176	66.92167964
56.82	95.68037516	130.0515421	90.8218738	66.52220144
56.84	98.595135	130.1966569	90.86583982	66.37349884
56.86	102.4544423	130.6018182	90.55041359	66.51404995
56.88	106.5238831	130.7457913	90.23087875	66.53092932
56.9	110.737931	130.0160876	90.09084336	66.61381434
56.92	115.3930954	129.0387683	89.69754879	66.47713116
56.94	119.4841723	127.3250035	88.90231368	66.12964304
56.96	123.0146274	126.4691728	87.4463424	66.1283335
56.98	125.8870583	124.8919132	85.77993427	66.35577308
57	128.0757943	123.8287532	83.92973708	66.41007483
57.02	129.2979988	122.405676	81.90979472	66.49037415
57.04	129.5203448	120.6556012	79.55519163	66.59592679
57.06	128.2513743	118.277299	76.98613712	66.60468298
57.08	126.3064112	115.6537213	74.58081404	67.12894024
57.1	123.7322449	113.1766326	72.32683386	67.81160785
57.12	120.2630013	111.0430377	70.32503286	68.51352816
57.14	116.1330124	108.9395571	68.43942057	69.54671453
57.16	112.2286905	107.05964	66.54044595	70.59529882
57.18	108.3469016	105.8870513	64.57867125	71.20443928
57.2	104.2396885	105.0005481	62.56079078	71.96429063
57.22	99.68914046	104.2150035	60.36882698	72.66251492
57.24	95.73333906	103.6140722	58.45916675	73.05300637
57.26	92.85702397	103.5450046	56.64382344	73.45901102
57.28	90.18968146	103.2589847	54.94629892	73.98201942
57.3	88.35668622	102.864234	53.62590353	74.88438366
57.32	86.89333704	102.4674831	52.37475377	75.48074628
57.34	85.87032157	102.290451	51.7513419	75.72309334
57.36	84.97993225	102.4396147	51.15574477	75.83796946
57.38	84.18014966	102.1217191	50.74265345	75.97475983
57.4	84.30843058	101.9658166	50.6961169	75.861622
57.42	84.89349681	101.1058631	50.55275862	75.56112246
57.44	85.45722014	100.5834756	50.55956214	74.7364951
57.46	86.77038123	100.2141561	50.75791283	73.68442916
57.48	88.15441096	99.15978259	51.28113257	72.0443877
57.5	90.21515826	98.38139246	51.36806249	70.8936303
57.52	92.53442916	97.98833148	51.52366367	69.41852462
57.54	94.29807261	97.65852766	52.16960259	67.54048741
57.56	95.98480129	97.34460714	52.54864395	65.50568814
57.58	97.43446253	96.5659278	53.00262918	63.47678936
57.6	98.78350389	96.84471939	53.40685206	61.49855092
57.62	99.28038932	97.11323289	53.83222166	60.04716149
57.64	99.34169886	97.61512792	54.2225857	59.02260188
57.66	98.86830418	97.6976398	55.06319345	58.24347052
57.68	97.77564061	98.22134493	55.96577308	58.19852563

57.7	96.48135403	98.49673678	56.84015876	58.69991202
57.72	94.75138841	98.34735464	57.92031348	59.47377591
57.74	92.80619577	98.02132066	58.70464759	60.5687835
57.76	90.59452927	98.68442815	59.32754475	61.78374861
57.78	88.11197796	99.74116493	59.71422995	63.22169582
57.8	85.40336536	100.586305	59.83142583	65.09523208
57.82	82.78405097	101.0380979	59.81554151	66.95316918
57.84	80.9704055	101.4802427	59.76762261	68.95923956
57.86	79.73672565	101.9658944	59.10567398	70.89113662
57.88	78.95045707	101.5737355	58.58466579	73.08062595
57.9	78.61403681	100.9032511	57.9050177	75.18203964
57.92	78.3149459	100.3762949	57.07193346	77.0061715
57.94	78.35192537	99.87238548	56.07941855	78.48448175
57.96	78.44561331	98.37622308	54.83383355	80.0128466
57.98	78.57178886	96.54432299	53.83830822	81.63678633
58	78.55223076	94.81138336	52.9640449	82.82076145
58.02	78.22379917	93.14440894	52.16122156	83.16582162
58.04	78.18139549	91.68526545	51.32591061	83.49646071
58.06	78.50570331	89.47208818	50.47170391	83.53981697
58.08	78.97350794	87.07708767	49.49334412	83.08046011
58.1	79.74447972	84.86424108	48.28416018	82.0923157
58.12	80.94502275	82.94834463	47.45760036	80.47870765
58.14	82.45546365	81.23628375	46.86302761	78.7670725
58.16	84.14983315	80.22368692	46.12294266	76.95276671
58.18	85.42344929	80.68605521	45.43093741	75.347658
58.2	86.66685307	81.83590555	44.95165942	73.51084538
58.22	86.84185054	83.31960764	44.66300536	71.72783901
58.24	87.65057539	84.91825058	44.00570533	70.36190616
58.26	88.21882091	86.98311659	43.90233087	69.28433613
58.28	88.71875114	89.68534028	44.05555668	68.93453231
58.3	88.96868541	92.30005966	44.61533825	69.06734655
58.32	89.55887754	95.35000303	45.59787542	69.50106381
58.34	90.09230559	98.49531702	46.53913844	70.3930357
58.36	90.18779755	101.835763	47.64048943	72.1017474
58.38	90.77276974	104.7953797	48.65028719	73.80292244
58.4	91.3817029	107.9202295	49.84103448	75.72342603
58.42	92.41383861	110.674144	50.7417929	77.75975023
58.44	94.07053393	113.4382263	51.72779958	79.52741935
58.46	96.6787744	115.5487906	52.70252199	81.28983315
58.48	99.65207908	116.7113894	53.43945293	82.80913237
58.5	103.014599	117.761806	54.074955	83.82715644
58.52	106.7963475	118.3738133	54.61700475	84.82770857
58.54	110.2636869	118.3718374	54.58809384	85.49648296
58.56	113.1047386	118.1547406	54.65117201	86.11883911
58.58	115.3904874	117.5877086	54.52251593	86.5912701
58.6	117.3373172	116.5182364	54.13602791	86.65214076
58.62	119.6726676	114.6056416	53.58753261	86.240901

58.64	121.7073698	112.148646	53.1715856	85.79411164
58.66	123.3554495	109.6829255	52.92150268	85.05485287
58.68	125.2213904	107.4362787	52.65325614	84.20869148
58.7	127.1263252	105.8027161	52.39922439	82.67325918
58.72	129.4253939	104.6016625	52.32906967	81.28281929
58.74	131.664954	103.0674456	52.56798463	79.74561331
58.76	133.4845758	102.2131399	52.66947214	78.15095662
58.78	134.9891283	101.9093083	52.8033694	76.50696835
58.8	136.4142866	102.2118758	53.48258368	75.30523612
58.82	136.803156	103.6650197	54.47111235	74.65164425
58.84	137.1726181	105.3007038	55.28888866	74.57778643
58.86	136.8444635	107.5467155	56.39389827	74.48447972
58.88	135.8402144	109.575679	58.06888563	74.78465062
58.9	134.241985	111.7483547	59.79252199	75.33447467
58.92	132.5127768	114.3662726	61.58030842	76.25184346
58.94	129.5986632	117.2491941	63.13610577	77.46141875
58.96	126.0568571	120.4516453	64.60749216	79.03461725
58.98	122.6015563	124.2431813	65.98502882	80.73974719
59	119.5040995	127.9538093	67.36786126	82.4063151
59.02	116.6231682	130.8810881	68.3959187	84.1364324
59.04	114.4653676	133.6379634	69.42619375	85.39901304
59.06	113.0701537	135.7331803	70.04097179	86.19371928
59.08	111.4242583	137.4637284	70.28726059	86.90443321
59.1	110.2322621	138.9610203	70.21666397	87.36822126
59.12	109.5877065	139.6970654	69.87923147	87.53389018
59.14	108.7047507	139.9781646	69.04640813	87.45094651
59.16	107.6809364	139.3889382	67.96558499	87.32046213
59.18	106.7538396	138.2802892	66.87745677	87.17364243
59.2	106.0461867	136.6897391	65.82460512	87.04470017
59.22	105.1946688	134.7035332	64.61626656	86.45738497
59.24	104.7002275	132.4158125	63.60750531	85.5890717
59.26	105.1831945	129.8562777	62.3270452	84.69622813
59.28	106.480542	126.7060754	60.85356356	83.54638791
59.3	108.33973	123.6608282	59.7943331	81.92173728
59.32	110.4458873	120.186484	58.92894226	80.71883911
59.34	113.0419153	116.1778056	58.11640712	80.03781575
59.36	116.1458469	112.7873668	57.46803418	79.93617555
59.38	119.1496865	109.2807989	57.3991354	79.76034078
59.4	122.0385196	105.5632652	57.51123369	79.8256214
59.42	124.8742785	101.7596926	57.49535747	79.9320811
59.44	127.4546648	97.89573364	57.23878046	79.94264435
59.46	129.6990353	94.33155627	57.36186874	79.72137729
59.48	131.4571827	90.84788452	57.84067752	79.99194458
59.5	132.6941116	87.82704217	57.89352108	80.24541814
59.52	133.8515735	84.59255233	57.55856912	80.86899282
59.54	134.686487	81.83565881	57.27234098	81.02003944
59.56	134.8449368	79.22522904	57.01449995	81.42025078

59.58	135.3904004	77.49763272	56.3489908	81.87919304
59.6	135.5846082	75.86700374	56.0198736	82.11761857
59.62	135.5168632	74.4670988	55.64602285	82.55550612
59.64	135.7650046	73.86388007	55.16640206	82.82295783
59.66	135.9815694	73.58870765	54.56120235	83.36661644
59.68	135.5086035	73.21807463	54.14403681	83.85610476
59.7	134.8646759	73.15544848	53.52002124	84.07552028
59.72	133.6512256	73.65157448	53.02538679	84.26337446
59.74	131.3691445	74.61631409	52.50316614	84.65697138
59.76	128.4766073	76.10867833	52.1995854	85.36980483
59.78	125.7950905	77.85425523	52.13267064	85.64303064
59.8	122.8796724	79.26722621	52.39099302	85.30563859
59.82	119.2076135	81.18821721	52.63651835	84.38704217
59.84	116.1220437	83.70240065	53.29579432	83.11468601
59.86	112.4923309	86.49784306	54.0749277	81.68155627
59.88	108.6412499	89.37605521	54.98537466	80.36778238
59.9	104.7634058	92.73599656	56.07505612	78.65227627
59.92	101.2035949	96.03136414	57.14747396	77.16317423
59.94	97.86257761	99.21516028	58.46492264	75.86791485
59.96	94.47265143	102.1656133	60.0904955	74.50722318
59.98	91.08210234	104.7515027	61.87671554	72.91878046
60	88.60202144	106.8682233	63.6440449	71.16434119
60.02	86.23427849	108.8495743	65.28365962	69.40104156
60.04	83.76681161	111.2700354	66.85950349	67.24832642
60.06	82.12005461	112.6597684	67.95675195	64.94903428
60.08	81.13443321	113.9810871	68.3026666	62.59242492
60.1	80.42572252	115.0180797	68.20771059	60.29996461
60.12	80.48558499	115.2398948	67.8049368	58.16934169
60.14	81.3217474	115.6697452	67.43193751	56.10725453
60.16	82.54026595	115.2845161	66.49207099	54.905856
60.18	84.87661038	115.2166397	65.11404389	54.066126
60.2	87.63156133	114.7273223	63.80730509	53.67760239
60.22	90.91182526	114.0761553	62.11223683	53.26498028
60.24	94.41167155	113.3374821	60.32884316	53.44958641
60.26	98.0674598	112.8196966	58.63852867	54.3253423
60.28	101.4510679	112.0337355	57.15961776	55.37774295
60.3	105.1748984	111.5619436	55.23992719	57.00545758
60.32	108.7262686	111.8219142	52.90235615	59.13629285
60.34	111.8809839	111.9260593	50.80677622	61.4375043
60.36	115.0436869	111.8202892	48.76591566	63.98523612
60.38	118.9338689	112.2027172	46.829369	66.15825159
60.4	122.2850581	113.0735363	45.2808292	68.30144201
60.42	124.9566316	114.1611781	43.76600769	70.19918293
60.44	127.7137709	115.5127101	42.66535342	72.11267772
60.46	129.7446789	116.5453049	41.74130852	73.24388512
60.48	131.1612337	118.4987855	41.22515623	74.38924259
60.5	132.4134746	121.3094539	40.91659217	75.12877136

60.52	133.6400253	124.1757215	40.88252503	75.8629548
60.54	133.772971	126.6796511	40.80268278	76.55370209
60.56	133.7226454	129.3869785	40.52244413	77.04808272
60.58	134.0779361	132.1434766	40.53829609	77.18348266
60.6	134.5226959	134.4352948	40.60855294	77.04806755
60.62	134.1586804	137.03973	40.76003944	76.61365457
60.64	133.6726009	139.8103074	40.78212256	75.89036303
60.66	133.5196693	141.4957943	40.73922844	75.00728183
60.68	133.3821802	143.4591111	40.88518253	73.87903024
60.7	132.7549793	144.9283072	41.01741733	72.88391243
60.72	132.333874	145.999912	41.24943068	71.86444332
60.74	132.3225038	146.5901102	41.60049146	70.95058145
60.76	131.5390697	147.3821711	42.34077055	69.60278693
60.78	130.7499413	147.9498443	43.44501062	67.95039337
60.8	130.0002215	147.5137314	44.9412519	66.21206795
60.82	128.9213389	146.899013	46.80819092	64.33884114
60.84	127.6258004	146.0881869	48.77022651	62.94228436
60.86	126.452977	145.2541015	51.11110122	61.61551522
60.88	124.6700748	143.9005167	53.45421478	60.11558095
60.9	122.2935575	141.9481758	55.54703913	58.69461422
60.92	119.6703843	140.0336333	58.07752756	57.46055112
60.94	116.7029639	137.5788341	60.94447164	56.43215189
60.96	114.0302245	134.9187896	63.79033269	55.45835069
60.98	111.9665891	132.5629315	66.79786025	54.3005228
61	109.3675326	130.0700121	69.88665487	53.03500961
61.02	106.800001	126.8559622	73.08116796	51.21443119
61.04	104.4971979	123.8930681	76.24294266	49.71971888
61.06	102.5049813	121.1730913	79.30190414	47.7453787
61.08	99.90750632	118.6034948	81.97285469	46.23703812
61.1	97.63609566	115.673694	83.98279401	45.01080595
61.12	95.67628779	112.7336465	85.36650015	44.07347962
61.14	93.65998685	110.3738113	86.14938214	43.41954899
61.16	92.14966427	109.011353	86.41329659	43.5396309
61.18	91.31611285	107.2955658	86.08279199	43.74321671
61.2	90.29367782	105.7375427	84.73909394	44.21881788
61.22	89.44842047	104.654508	82.82644757	44.91636465
61.24	89.17492567	103.852255	80.5216038	46.20423905
61.26	89.94381636	103.2812074	78.27475174	47.95945192
61.28	90.57921933	103.8770422	75.74560623	49.88953484
61.3	90.66435737	104.844591	73.01210638	52.44176661
61.32	91.27957124	105.8869754	70.43075033	55.14951967
61.34	92.4934685	106.6960077	68.14896046	57.97649611
61.36	94.01786733	108.3173263	66.19282536	60.72377389
61.38	96.29256345	109.0471999	64.28964	63.62455253
61.4	99.03649712	110.0234048	62.72386793	66.41396703
61.42	101.8803499	111.5638962	61.36384366	68.9169188
61.44	104.638017	112.8495308	60.27344828	71.12766205

61.46	107.6639458	113.3012357	59.45886338	73.12597937
61.48	110.4726272	113.3567348	58.77391546	75.01276064
61.5	113.2511568	113.1981333	58.24865406	76.73598038
61.52	116.3948276	113.5956012	57.97999393	78.33370412
61.54	118.9569006	113.5268743	58.07942967	79.61500354
61.56	120.7525442	113.7712853	58.10073213	80.30796643
61.58	122.6755274	113.4410911	58.36406007	80.65538073
61.6	124.0972596	113.1274507	58.91794317	80.50514309
61.62	125.3228193	112.2703357	59.6038022	79.92226514
61.64	126.2817251	111.5791334	60.49163212	79.00233896
61.66	127.1242401	110.6699383	61.40456669	77.35993326
61.68	126.5291556	109.589098	61.83020831	75.63987157
61.7	125.8809202	108.2856406	61.95782688	73.72083628
61.72	125.3326009	107.1127677	61.5584508	71.90916372
61.74	124.3904915	106.1056356	60.65405501	70.10846092
61.76	122.7192123	104.3940823	59.07745273	68.65045505
61.78	121.2123946	102.1402629	57.2842704	66.67790474
61.8	119.322345	100.3368672	55.4287299	64.96494084
61.82	117.6033765	99.00113965	53.72617858	63.60872889
61.84	115.5539964	98.09239155	52.14244514	62.69609061
61.86	113.493965	97.00049348	50.55042573	61.78382142
61.88	110.5742583	96.62175346	48.92523814	61.16307109
61.9	107.6617878	96.11911316	47.52688745	61.42647588
61.92	105.2057306	95.88240065	46.47944888	61.85175447
61.94	103.3358803	96.10950551	45.9006846	62.67110931
61.96	101.3848711	96.70652847	45.44216908	63.6809728
61.98	100.1173203	97.1334867	44.96370614	64.92257559
62	99.41836485	98.01303367	44.73739003	66.01083123
62.02	99.63401456	98.93991	44.60131864	67.14791688
62.04	100.2964081	99.51287087	44.57459905	68.08179492
62.06	101.0057791	100.0429487	44.67865709	69.40686318
62.08	101.8753645	101.3731641	45.44440489	70.3502791
62.1	102.7684457	103.2966114	46.23709172	70.90496714
62.12	103.3307422	105.4489301	47.38950652	71.04148549
62.14	103.6147305	107.476308	48.63001719	71.04815553
62.16	103.9883254	110.2658095	49.92966225	71.07251593
62.18	104.3895126	113.2532147	51.55761654	71.06926888
62.2	104.5380059	117.3603013	53.08902821	70.7569643
62.22	104.3846526	121.0788624	54.61669936	70.36989787
62.24	104.5250784	124.9761068	55.8235049	69.47848114
62.26	104.1976024	128.0304298	56.62072606	68.41730408
62.28	102.7122571	131.0388057	57.03568713	67.29176155
62.3	101.7817049	133.5922894	57.20188695	66.29858732
62.32	100.4711973	136.1174386	57.30029326	65.62244514
62.34	98.81994337	138.200093	57.05777632	64.97081606
62.36	96.86082415	139.8475144	56.51570027	64.59371726
62.38	95.48549398	141.2084073	56.03279098	64.2522075

62.4	94.14454849	142.5135696	55.29651026	64.22286581
62.42	92.41150066	143.5795358	54.41745374	64.16549803
62.44	90.67562342	143.945229	53.50678936	64.13966731
62.46	89.15797755	144.0142097	52.75882698	64.03560926
62.48	87.73396703	144.4394378	52.11643038	64.86115381
62.5	86.6558651	144.520808	51.51398726	65.95520477
62.52	86.01127111	144.2772768	51.25607948	67.14413894
62.54	85.51315704	143.7208383	50.86521489	68.47597533
62.56	85.0664597	142.9387886	50.46730509	70.01061887
62.58	85.75299525	141.9664314	49.8589999	71.65116796
62.6	86.92296794	140.8091668	49.5873243	72.79236525
62.62	89.20504197	139.1716958	49.34192133	73.93959551
62.64	91.44912428	137.1883254	48.94213571	75.02615128
62.66	94.46352412	135.1746951	48.6919365	76.07146628
62.68	97.53634645	132.8047477	48.87313277	76.26757003
62.7	101.2310213	130.4659298	49.29856002	76.53289412
62.72	104.4778673	127.5472859	49.93992921	76.74878552
62.74	107.8962099	124.7675913	50.76934169	77.34012337
62.76	111.4231075	122.1810497	51.84454748	77.58057842
62.78	114.3713985	119.9589332	52.44921529	77.81171908
62.8	117.1415259	117.8639691	53.04834766	77.82367782
62.82	119.7813065	115.0281454	53.88558095	77.9973516
62.84	122.4865396	112.3453878	54.85562443	78.33051876
62.86	124.4448185	109.2919587	55.95040044	78.51286177
62.88	126.5233987	106.338289	57.02436849	78.48490444
62.9	129.0269896	103.1529164	58.25211144	78.77488017
62.92	131.1319537	99.68050763	59.43169178	79.06973607
62.94	132.8270543	95.86750228	60.59959045	79.6947386
62.96	134.8190747	92.62360906	61.7471716	80.478919
62.98	137.5449641	89.60428456	63.05886136	81.228739
63	139.6079118	86.83466073	64.5151532	82.01973
63.02	141.2890737	84.1296127	65.62033775	82.90783699
63.04	143.3625918	81.98754576	66.69531297	83.86077864
63.06	144.8519699	80.3979553	68.05090201	85.02799676
63.08	146.072076	78.95116796	69.26718981	85.91473759
63.1	146.3865315	77.66194256	70.45683891	86.12832845
63.12	146.5978238	76.79712205	71.92348367	86.31079482
63.14	146.2195814	75.98452119	72.81976742	86.23874608
63.16	145.874503	75.55859642	73.51929113	86.31913439
63.18	145.5039933	75.0457296	73.6783426	85.88805339
63.2	144.8323369	74.73438164	73.71054808	85.41696329
63.22	143.4074942	74.86619982	73.24058348	84.99331378
63.24	141.3360785	74.70906158	72.38119527	84.51864799
63.26	139.2201395	74.83615027	71.4766306	83.47371827
63.28	135.9992497	74.40269491	70.67061584	82.11046617
63.3	132.5609536	73.84532309	69.62292244	80.7641895
63.32	127.4823693	73.3920093	68.14670644	79.46753666

63.34	122.3770169	73.47658813	66.67815148	77.98636465
63.36	116.2311346	73.48271109	65.24443017	76.12914754
63.38	109.6006239	73.77250784	63.96977753	74.60369501
63.4	102.6171665	74.01447366	62.81867934	73.06295682
63.42	96.00139145	74.32760947	62.09461624	71.9299373
63.44	89.33782081	75.18761048	61.25007382	70.82087774
63.46	82.61080392	76.24118313	60.26580342	69.27603499
63.48	76.92016887	77.40403276	59.5658651	67.64994539
63.5	71.43678734	78.28633633	59.32051775	66.46831227
63.52	66.50013854	79.27884215	59.32373647	65.54949742
63.54	62.45689048	80.29138538	59.76679644	64.9644686
63.56	59.77731823	81.58079482	60.05477804	64.51165234
63.58	58.36469512	82.75966023	60.71410861	64.52748812
63.6	57.28085752	83.5532521	61.27164931	64.59435231
63.62	57.57293558	84.73350389	61.55491657	64.76149156
63.64	59.12312266	86.59075134	61.72381535	64.55712408
63.66	61.12379209	87.86293558	62.06821418	64.17086359
63.68	63.5864597	89.01524826	62.43627161	63.54445141
63.7	66.64411568	90.23262716	62.84105774	63.48956922
63.72	70.95751744	91.36185054	63.31921023	63.37948124
63.74	75.83726262	92.01526646	63.63443422	63.41159167
63.76	81.28253615	92.61954192	63.63368288	63.26477197
63.78	87.31951663	93.12481444	63.51820103	63.08167054
63.8	93.56255132	93.8446759	63.05615634	63.57227424
63.82	99.33200222	94.3295045	62.17852563	63.95519163
63.84	105.2626899	93.76975528	61.22767317	64.34497624
63.86	110.5665305	93.15532612	60.27400951	64.49112549
63.88	114.8314046	92.01507837	59.13227222	64.80819193
63.9	118.1422409	90.83930529	58.06482253	64.88579836
63.92	120.266937	89.85944585	56.78532915	64.98328244
63.94	122.4710881	88.66032663	55.70444534	64.49887046
63.96	122.8471028	87.49507028	54.74964	64.06230559
63.98	122.7309334	86.18386692	53.81345839	63.70776823
64	121.8408454	84.82498635	52.77637274	63.38299525
64.02	120.4545323	83.90912023	52.04922742	62.83778946
64.04	118.110267	82.97796036	51.36500253	62.16361311
64.06	115.8172717	81.80882698	51.37228335	61.23621195
64.08	113.5771686	80.77241278	51.63858429	60.4280898
64.1	111.3930074	79.64331479	52.35591465	59.84073314
64.12	108.9334463	78.80370108	53.19474871	58.79425624
64.14	106.6810759	78.25572353	54.21348771	57.63023258
64.16	104.7638032	78.20351401	55.4724866	56.35889271
64.18	103.4811103	78.11724542	57.07903125	55.2668561
64.2	102.3068167	78.30370209	58.49718273	54.0134058
64.22	101.7675468	78.70451512	60.02789261	53.01983517
64.24	101.3565002	79.51327232	61.42756093	51.66823541
64.26	101.1610982	80.31517646	63.18173526	50.62707453

64.28	101.3411932	81.54286682	64.80028011	49.75361715
64.3	102.4613561	83.2550905	66.4042795	49.0561624
64.32	104.303061	85.56886338	68.14236121	48.4025857
64.34	106.7342128	87.84669127	70.01464557	48.56022955
64.36	109.6011548	90.88992112	71.70486905	49.06762564
64.38	113.057479	94.68892203	73.54308322	50.39878552
64.4	116.2442471	98.68627161	75.14260694	51.89870159
64.42	119.6484387	102.5529437	76.67349378	53.63717868
64.44	122.9220265	106.8229022	78.16785519	55.5663424
64.46	125.729368	111.2372778	79.50936798	57.86967742
64.48	127.9122206	115.4889726	80.26698352	60.26640409
64.5	129.8324633	119.2557529	80.98022045	62.21932956
64.52	131.3089908	122.3043604	80.88554151	64.23319749
64.54	132.2522318	125.410183	80.82413085	66.35691475
64.56	132.1644949	128.5006239	80.25761654	69.02591668
64.58	132.0594499	131.2833168	79.59956618	71.62697543
64.6	131.4022024	134.0051552	78.74040247	73.88679543
64.62	130.5621832	136.3391941	77.68197998	75.6196127
64.64	128.5923117	138.2676388	76.49664071	77.20763373
64.66	127.2254748	139.1469269	75.18055112	78.52533724
64.68	125.4679604	140.2291576	73.48349985	79.33876833
64.7	123.5874426	140.8196956	71.95006573	79.56935383
64.72	121.0776226	140.160987	70.37500354	79.1376125
64.74	119.1000748	138.6380989	69.15832845	78.5917029
64.76	117.5391051	136.7781343	67.69422591	77.67128527
64.78	116.418645	134.6204965	66.24770958	76.47617656
64.8	114.9558156	131.9300738	64.57255132	74.6280989
64.82	114.1829032	129.1319223	62.80874507	72.5464506
64.84	113.7702478	126.1400678	60.71099707	70.1777298
64.86	114.2996107	122.5718637	58.56881687	68.23456163
64.88	115.0256831	119.3808595	56.55895035	66.35696633
64.9	116.1927212	116.1737496	55.03145616	65.20171605
64.92	117.8491678	113.3757599	53.73807159	64.60675094
64.94	120.1734382	110.8766437	53.03494185	64.38744666
64.96	123.1424057	108.9285944	52.82220851	64.39186773
64.98	126.3123258	107.2515067	53.14200121	64.47772373
65	129.648741	105.8057347	53.94244514	64.64813631
65.02	133.206308	104.9442573	55.25571544	65.27533016
65.04	135.4775073	104.6996461	56.88562443	65.97648296
65.06	137.6222813	104.539821	58.7574052	67.06488624
65.08	139.0706553	104.3669744	60.60749621	68.16764081
65.1	140.331444	104.1123106	62.57015876	69.59897866
65.12	140.6003489	104.1744797	64.76792294	71.60829002
65.14	139.9840722	104.5695278	66.97229042	74.27414804
65.16	139.1891041	105.0866721	68.98934068	76.65876631
65.18	137.3877864	105.8583022	71.35385277	78.71644656
65.2	134.7930205	106.6880524	73.17643341	80.71455456

65.22	131.7490757	107.7720851	75.06063808	82.87838912
65.24	127.6258833	109.4728638	76.79849934	84.98222874
65.26	123.5427627	110.8959096	78.22630499	86.56945697
65.28	118.2705784	113.1228294	79.44864597	87.49709071
65.3	112.9138336	114.8742259	80.0324684	88.22137122
65.32	106.9792962	116.1361725	80.42471939	88.61353423
65.34	101.3984923	117.3416908	80.52638386	88.75321772
65.36	95.53467388	118.7235443	79.57233391	88.37953686
65.38	89.87676408	118.9597533	78.3861351	87.33492163
65.4	84.88698352	118.1503347	76.67037618	85.61795935
65.42	80.918378	117.1543422	74.61966832	84.01550106
65.44	77.3641167	115.5732015	72.04077864	81.75362423
65.46	74.3958196	113.8920407	69.37471736	79.41541106
65.48	71.57406816	112.4838396	66.70088786	77.06106988
65.5	69.45825564	110.8271827	64.17027809	74.57443523
65.52	68.23233593	109.3834361	61.56433006	71.69325817
65.54	67.97787643	107.7617798	59.47321772	68.622703
65.56	68.26956821	106.1637557	57.76934372	65.50124684
65.58	68.92206694	104.6445111	56.6628466	61.94253716
65.6	70.89738902	104.0193285	56.03905653	58.07101527
65.62	73.10006168	103.12685	55.88377996	53.87654161
65.64	75.39643543	101.760718	56.06755992	50.05930529
65.66	78.46593488	100.1824583	56.7897654	46.51713621
65.68	81.51812013	98.81088482	58.01182223	43.52447467
65.7	85.14644959	97.5843695	59.34577611	41.13561432
65.72	88.68272019	96.24183537	60.99022449	39.34962585
65.74	92.925856	95.04138234	62.34476792	38.31850844
65.76	97.3782162	94.27242188	63.98258469	37.53603499
65.78	101.3852857	94.45352311	65.79911214	37.70928203
65.8	105.6919941	95.25419557	67.40205177	38.64290525
65.82	109.9561513	96.49181818	69.031622	40.0510092
65.84	113.9867004	97.96147437	70.3559005	41.67641116
65.86	117.3757013	99.55322378	71.51542724	43.85058247
65.88	120.2415512	101.6795126	72.42374558	46.722703
65.9	122.6042815	103.6957761	72.99241278	50.22715846
65.92	123.7155911	105.7026585	73.67961472	54.10028213
65.94	124.5995116	107.4041329	73.63234301	58.30944383
65.96	125.0522287	109.0161472	73.22167863	62.56284559
65.98	125.4594721	109.8724694	72.80993832	66.68716453
66	125.7017211	110.6109152	72.24702093	70.8421347
66.02	125.3867509	110.7111316	71.24497017	74.88130145
66.04	124.797841	110.4493073	70.10581454	78.37946506
66.06	124.1360734	109.7150116	69.01899484	81.51651936
66.08	122.6043513	109.0786935	67.86086763	84.34563657
66.1	120.2274507	108.2043473	66.69513399	86.70276671
66.12	117.3140388	107.5937628	65.32289918	88.3860987
66.14	114.0499181	107.5123915	64.43421377	89.63965214

66.16	110.0218293	107.7601112	63.99409748	89.87846092
66.18	106.0223319	107.5449378	63.64134897	88.85004146
66.2	102.2806836	107.4627536	63.31480635	86.92188391
66.22	98.21133279	106.5178198	63.12256345	84.58485792
66.24	94.49424209	106.1095449	63.31332996	81.78387602
66.26	91.29930124	106.0583123	63.74316918	78.44045303
66.28	88.87637577	106.2859945	63.80995146	75.08711801
66.3	86.89303873	105.5708585	63.64280918	71.80973304
66.32	85.30808676	104.6381242	63.56601679	68.93930226
66.34	84.61207807	104.4026009	63.63376782	65.79589847
66.36	84.61079887	104.5081646	63.79232885	62.45249772
66.38	85.0393154	105.2076095	63.83895035	59.20866417
66.4	86.17343816	106.0694115	63.86533421	56.4533512
66.42	87.38339771	107.0107099	63.93273435	53.94578724
66.44	88.84692891	108.515584	64.29222874	51.58134998
66.46	89.49297806	110.5161948	64.99485388	49.65906866
66.48	90.11997067	112.2934736	65.57115482	48.02796238
66.5	90.66313176	113.6314986	66.47089696	46.69500152
66.52	91.30665689	114.9024735	67.66904844	45.92230559
66.54	91.98598544	115.8139145	68.83680858	45.62046516
66.56	93.18143291	116.5154121	70.38353726	45.65805643
66.58	94.95360906	116.2004631	71.64224896	46.15645869
66.6	96.69390029	115.6057084	72.95608252	46.73472747
66.62	98.91331581	114.6753716	74.08727576	47.39318637
66.64	101.1405188	113.590268	75.30231166	48.16611083
66.66	103.1704399	112.6705491	76.53391041	49.03237739
66.68	104.476577	111.420719	77.35230863	50.33495399
66.7	105.3173122	110.1300829	77.89063707	51.69749317
66.72	106.2243109	109.4306533	78.23330569	53.02879765
66.74	107.3789392	109.0468136	78.2195136	54.30297705
66.76	108.0489483	108.0903104	78.13165841	55.42535949
66.78	109.4534493	106.5695844	77.56321974	56.47699161
66.8	110.8689069	105.140723	77.01578218	57.18966023
66.82	112.53369	103.2771524	76.52042269	57.80889574
66.84	114.4029599	101.3872747	75.80842047	58.10769137
66.86	116.6169026	99.32232076	74.27892305	58.60250581
66.88	119.3991617	96.81758115	72.31126605	58.98112246
66.9	122.2330124	94.2797654	70.22840024	59.36052685
66.92	125.2496137	92.34960562	68.13976034	59.76206391
66.94	128.5854738	90.41500556	66.02565982	59.65126403
66.96	131.4632501	88.9835221	63.59915259	59.71712509
66.98	133.643783	87.86961978	61.22433512	59.85548589
67	135.5584882	86.92999899	59.01307615	60.05662959
67.02	136.649726	86.67672768	57.18987966	59.56180099
67.04	137.1819193	86.63477804	55.67590151	59.16426535
67.06	136.0621832	86.9246213	54.5625584	58.97027404
67.08	134.6786217	86.98370412	53.51751542	58.93339064

67.1	132.4844828	87.6450905	53.17049348	58.69368288
67.12	129.7186328	89.21791587	52.99285873	58.81152493
67.14	126.0398999	90.98483163	52.9273607	59.09620589
67.16	122.7191789	92.75387805	52.94964809	59.49777328
67.18	119.6820619	94.21505713	53.35478208	60.22453635
67.2	116.0242704	95.94682577	53.99708161	60.79488219
67.22	112.2214956	97.80635656	54.40068157	61.5248741
67.24	108.414862	99.75940338	55.22693397	62.30018809
67.26	103.999728	102.0850278	55.92876934	63.36001213
67.28	99.24869249	104.0512549	56.50228638	64.29915259
67.3	94.54212357	106.7478208	57.1816574	65.71798766
67.32	89.79588836	109.4925119	57.74418647	67.51326929
67.34	84.84502781	112.3761523	58.08700273	69.46574376
67.36	79.67008494	113.954053	58.42435737	71.49794924
67.38	75.25699869	115.0738902	58.59880271	73.36165537
67.4	70.74087774	115.1926332	58.80024067	75.21357872
67.42	66.91234705	114.6261846	59.04404692	77.05585499
67.44	63.39594701	113.6217828	58.85805744	78.84814845
67.46	61.17905147	111.9535474	58.30165133	80.69425726
67.48	59.81412074	109.3399666	58.1304682	82.28810699
67.5	58.88229143	106.8006462	57.66884316	83.7446668
67.52	58.79771059	104.3570169	57.30972697	85.3058378
67.54	59.50111437	101.822339	56.76657296	86.46986955
67.56	60.47204166	99.32975326	56.05022045	87.06842047
67.58	61.5074234	97.11950753	55.21362929	87.13332592
67.6	62.80127617	94.96338356	54.3421529	86.78610476
67.62	64.43220447	93.22048539	53.48595611	86.09833957
67.64	65.9837658	92.18236424	52.2501709	85.64273233
67.66	68.16762564	91.51001719	51.04508848	84.62208818
67.68	70.88077258	90.93242997	49.87423299	83.33019719
67.7	73.36163515	91.21791485	49.16387198	81.73094448
67.72	76.53907979	91.86948225	48.49571645	80.63967034
67.74	79.92941956	92.75677318	48.02121954	79.13010719
67.76	84.46593184	94.08984225	47.67911316	77.64288401
67.78	89.3935312	95.97317525	47.85982506	76.21134998
67.8	94.14410355	98.21386086	47.99548589	74.58437759
67.82	98.57744868	100.4785024	48.57180301	73.0193781
67.84	103.2494742	102.6205582	49.82782486	71.23111943
67.86	107.8167054	104.9494954	51.15210234	69.82190919
67.88	112.1254323	107.2993771	52.62584993	68.3061533
67.9	115.5499788	109.8487279	54.07539994	67.23734351
67.92	118.1199504	112.2789514	55.72732127	66.23563657
67.94	119.9204277	114.6078491	57.18589342	65.45985742
67.96	121.5637628	115.8958742	58.68534129	64.78105875
67.98	122.5914804	116.684053	60.34042471	64.49535443
68	122.9300516	116.1921347	62.25579533	64.62974113
68.02	122.8282324	115.3276327	64.1751532	64.72047831

68.04	122.6412691	113.4693983	65.97135201	65.24775306
68.06	122.8384933	111.1265527	67.59266963	66.04348974
68.08	122.1067792	108.3165355	69.22119325	67.00979877
68.1	121.6184913	106.1436616	70.15918192	67.97162605
68.12	121.1941076	103.8417595	70.61413186	69.49964809
68.14	120.2686247	100.7636091	70.62162908	70.89088179
68.16	118.8620063	97.77350592	70.29508949	71.88556174
68.18	117.0552816	95.817748	69.55980888	72.83916776
68.2	115.2065679	93.75669026	68.64268379	74.28150976
68.22	112.6970513	92.05994843	67.13205885	75.53160178
68.24	109.3600425	91.35292042	64.78806856	76.49388007
68.26	105.9500738	90.72431388	62.38945899	77.61316513
68.28	102.6064385	90.56153605	59.8510719	79.0838285
68.3	99.41733037	90.89012944	57.29841035	81.06736475
68.32	96.80349176	91.84338154	54.53078168	82.89199009
68.34	94.51514309	93.09052786	52.06462534	84.13483264
68.36	92.46133178	94.27970169	50.18891091	85.76685813
68.38	91.02063202	95.53963596	48.48235413	87.36979776
68.4	90.17323187	96.83210234	46.82624229	88.82086662
68.42	89.69475882	98.19265143	45.63186065	89.46333603
68.44	89.91112549	100.4525392	44.7312701	89.87328749
68.46	90.10776115	102.6151259	44.13937405	90.01799879
68.48	90.04352816	104.4874547	43.93993629	89.33510972
68.5	90.02315502	106.301264	44.39923956	88.62934068
68.52	91.10127617	108.1662878	44.92696127	87.55114167
68.54	92.98999899	109.6214835	45.37385984	86.61088381
68.56	94.89768733	110.8461685	46.33066134	85.3999909
68.58	96.48072909	111.3248923	47.48025887	84.20835979
68.6	99.00864091	111.2142603	49.05317019	83.10099808
68.62	101.8216291	110.5600233	50.81124077	82.13348266
68.64	105.5612964	109.3985762	52.71629184	81.6716756
68.66	109.2513075	107.741801	54.52013955	81.41278087
68.68	112.7561897	106.2609677	56.48316918	81.27705531
68.7	116.9183456	105.4334402	58.34421984	81.10667307
68.72	121.1934725	104.1980271	60.16823339	81.02626454
68.74	125.2479867	103.3857387	62.03065426	80.38316918
68.76	128.4633482	103.1968632	63.90846597	79.6838022
68.78	131.5379159	103.6423359	65.42518556	78.99910001
68.8	133.3750501	103.6833937	66.85664981	78.71111538
68.82	134.0615876	104.1889251	67.838739	78.07031247
68.84	134.4158975	105.4254323	68.70767621	77.81407321
68.86	133.7058378	106.9964739	70.24859743	78.11020932
68.88	132.4370604	108.4474285	71.46364951	78.74810497
68.9	129.9019557	110.5756204	72.31619577	79.28302862
68.92	126.9120963	113.316036	72.80146021	79.37493073
68.94	124.0014885	115.4705167	73.43422085	79.83045101
68.96	121.4127981	117.6704025	73.68493376	80.4185135

68.98	118.8793093	120.0088735	73.58425119	80.81525635
69	116.1756295	122.8019982	73.26823541	80.78890585
69.02	113.4907018	125.5722641	73.31753868	80.19096673
69.04	111.1356062	127.7878886	73.17473051	79.73087774
69.06	108.9170412	129.2490171	72.71730205	78.55697543
69.08	107.5958004	130.6208424	72.41674588	76.97105774
69.1	107.0853292	131.8299717	71.9132521	75.05072606
69.12	107.1158034	132.6524057	71.26724644	72.98674386
69.14	106.951173	132.1270604	70.71294064	70.9777207
69.16	106.8010962	131.2106502	70.28393973	68.82328345
69.18	107.6373253	129.2895176	69.41815249	67.1074861
69.2	109.8640914	126.5014905	68.43346041	65.70568308
69.22	112.3710052	122.9285873	67.42526444	64.87798969
69.24	114.6947811	119.1135767	66.299009	64.20244514
69.26	116.893243	114.4272485	65.19421276	63.58195065
69.28	119.4112458	109.4705673	64.13393569	62.96593791
69.3	121.9979472	104.0998028	63.09148751	62.33695318
69.32	124.9749823	98.71466882	61.89280615	61.83373142
69.34	127.4001102	93.14461321	61.10330165	61.09069572
69.36	129.5452007	87.58104055	60.78953686	60.29530893
69.38	131.8846658	81.97931338	60.88290626	59.42339974
69.4	133.3421418	76.0458014	61.2435049	58.86084437
69.42	134.1602629	71.1529366	61.60675801	58.28435939
69.44	134.3735545	66.25880979	62.21822732	58.09642734
69.46	133.4142512	61.79985438	62.76648094	57.66629487
69.48	131.8279442	57.36518556	62.71959652	57.57882496
69.5	130.0780827	53.7695318	62.55393973	57.36567297
69.52	128.3871544	50.62503792	62.57031348	57.15372535
69.54	126.351622	47.7645859	62.82212863	56.99314693
69.56	124.7144656	45.64889574	62.43127414	56.84510668
69.58	122.6592932	44.46389726	62.07264132	56.40703104
69.6	120.9942916	44.21718475	61.698288	55.79227829
69.62	119.5672859	44.20029326	61.54703307	55.27916169
69.64	118.0320063	44.72160582	61.31250177	54.74717464
69.66	116.2245151	46.45808171	61.13392557	54.23848316
69.68	114.5784943	48.73311558	61.3813065	53.64513196
69.7	112.9403913	51.06040853	61.61823238	52.77320053
69.72	110.9339822	53.19636465	61.89312165	52.1779189
69.74	109.0762433	55.47794823	61.97025685	51.74852159
69.76	107.957388	58.47081302	61.94426433	51.69741632
69.78	106.4578774	61.5052159	61.64052381	52.15553039
69.8	104.1580038	64.49064516	61.63103954	52.99066741
69.82	101.1227981	67.55410153	61.70571342	54.25669431
69.84	97.7575134	70.77816463	61.85256143	55.62335019
69.86	95.19712913	73.32561836	61.59389625	57.32260896
69.88	92.47832541	75.96708565	61.27589342	59.20651734
69.9	89.61081404	78.82057033	60.87780261	61.47058449

69.92	86.70266154	81.75366367	60.60334715	63.4521802
69.94	83.58692891	83.95849328	60.92591364	65.04444939
69.96	80.6674952	85.76326828	61.069369	66.48818081
69.98	78.02534331	87.00064516	61.2308019	67.81500152
70	75.55841137	87.95986652	61.22702397	69.06166144
70.02	73.00722217	88.75106077	61.40536556	69.94744969
70.04	70.87905248	88.83871473	61.72941046	70.7768015
70.06	68.31842755	88.27203155	62.05505511	71.53184346
70.08	65.69536657	87.1781444	61.98410355	72.30984731
70.1	63.55377086	86.151982	61.68545758	72.00688341
70.12	61.80131965	84.49134998	61.20392355	71.42095055
70.14	60.52528163	83.02573971	60.2975498	70.14321266
70.16	60.21295985	81.13960967	58.9166124	68.59656184
70.18	59.98002528	79.40462635	57.87838204	66.42456265
70.2	60.03632723	77.70439984	56.87869754	64.34450905
70.22	60.39973708	75.68997775	55.68780261	62.44859136
70.24	61.1542977	73.69753969	54.45774194	60.3289372
70.26	62.0980898	72.05955001	53.22766913	57.87894125
70.28	63.08854181	70.31682374	52.25380726	55.25811912
70.3	64.11133987	68.54646577	51.4880544	52.8724775
70.32	65.05342198	67.32806249	51.03253008	50.94068055
70.34	66.27503893	67.07733138	50.66703104	49.40453029
70.36	67.48036202	66.97627869	50.69307513	48.09377288
70.38	68.25590859	67.4261533	50.86119325	47.2747841
70.4	69.18141673	68.49565679	51.08798867	46.60929417
70.42	70.61248357	70.29896349	51.02598139	46.25120841
70.44	72.27256548	72.94024876	51.08895035	46.25772778
70.46	73.88788047	76.00911417	50.89403175	46.97848822
70.48	74.81193548	79.82975124	51.03068055	47.97926484
70.5	75.82830114	83.75540095	51.56041966	49.49856002
70.52	76.72322985	87.69152796	52.27418748	50.72143695
70.54	77.76678431	91.25266154	52.64439984	52.32851047
70.56	78.45221559	95.04506725	53.04195874	53.81333097
70.58	79.66213773	98.87861766	53.93585297	55.36274446
70.6	80.06073213	102.5928668	55.09475579	56.95020932
70.62	80.16947113	105.3512822	56.53431085	58.77134594
70.64	80.33090909	107.5222217	57.7484326	60.92339064
70.66	79.94411771	108.7154586	58.86190211	62.91163313
70.68	79.60337041	109.4283123	59.70191728	64.5211437
70.7	79.2349368	109.7148569	60.83735969	65.79064112
70.72	78.92486399	108.8866205	61.99665689	67.30676813
70.74	77.80530084	107.7132784	62.92697543	68.21221054
70.76	77.42743553	105.58784	63.57523713	68.75788957
70.78	77.44100819	103.0807362	64.40576701	69.03752452
70.8	77.78930226	100.117391	65.00101527	69.75161998
70.82	78.3099636	96.61442714	65.4314774	70.56227526
70.84	78.61635454	92.5516665	66.00659925	71.29813429

70.86	78.99125695	88.60124785	66.90800991	72.19678835
70.88	79.3410901	84.4210901	67.81933866	73.39659824
70.9	80.16779654	80.3835403	68.57910203	74.61997674
70.92	81.54265244	76.87288603	69.47894833	75.32369299
70.94	83.20638892	73.86694509	70.25411366	75.92851249
70.96	85.01861159	71.42763272	71.393694	76.46645566
70.98	87.57300435	70.27282637	72.07443624	77.16791384
71	90.54167762	70.24867226	72.48750935	77.48771767
71.02	94.06406816	71.32590555	72.6102073	77.99777227
71.04	98.05522601	73.32389321	72.52246537	78.63295278
71.06	102.6835676	76.06886945	71.78339468	79.03043179
71.08	107.6360906	79.34692284	70.40129235	78.91127313
71.1	112.6429103	82.95898069	68.84264739	78.87488725
71.12	117.421805	87.13435231	66.76829912	78.89734452
71.14	121.9612034	91.47203458	64.61326929	78.98530792
71.16	125.8214804	95.67602083	62.99590252	78.71334918
71.18	129.7016928	99.24323895	61.62865912	78.66004652
71.2	132.471353	102.4647275	60.02909799	78.28500556
71.22	134.7777601	105.0100849	58.56275154	78.30632015
71.24	136.4178785	107.6055759	57.06041966	78.14108909
71.26	136.764328	109.2930226	56.02485489	77.96601072
71.28	135.6136859	110.2602589	55.08493275	78.13903934
71.3	133.9523359	110.1943715	54.48025078	78.1260178
71.32	131.3788877	109.3774082	53.7953059	77.94463849
71.34	127.9094924	108.0626808	53.20414602	77.31998685
71.36	124.7814885	106.3222014	52.83795834	76.77423804
71.38	121.0490454	104.3336768	53.11749115	76.73641116
71.4	116.5872828	101.3343574	53.39902922	77.19225705
71.42	111.5726393	97.52458995	54.24776823	77.50363737
71.44	106.7595217	92.64173728	55.51744059	77.95488017
71.46	101.6281879	88.01986045	57.01520477	78.73511174
71.48	96.23603701	83.3190899	58.42232177	79.38029224
71.5	90.98882192	78.85498331	59.99831934	79.59860148
71.52	85.68322277	75.06153807	61.8260724	79.09780463
71.54	80.78563454	71.98426433	63.65123875	78.62248761
71.56	76.51238447	69.41736374	65.35625341	77.92978663
71.58	73.60806249	67.75317828	66.45702194	77.32409647
71.6	71.38078269	66.71853372	67.24562443	76.14100516
71.62	69.9176216	66.37902417	67.5500091	75.13310041
71.64	69.69211953	67.13372636	67.41991101	73.63911821
71.66	70.46714026	68.52953281	66.57604712	71.9865133
71.68	71.91123673	70.77621398	65.57766003	70.47708363
71.7	73.82759632	73.89730509	64.91625139	69.37800991
71.72	76.34516534	77.14747396	64.17616544	68.26140358
71.74	79.01917181	80.2433967	63.42784508	66.63805036
71.76	81.72528668	83.35523814	62.384414	65.03071494
71.78	84.64902316	86.792342	61.43775306	63.7478016

71.8	87.41015269	90.92329052	60.00679442	62.2686399
71.82	89.76210941	95.11984124	58.81401962	60.83942967
71.84	91.76698554	98.81023562	57.73775609	59.46573668
71.86	93.02336434	102.2224694	56.76417332	58.58132875
71.88	93.83041157	105.3105885	55.80724542	57.77344019
71.9	94.55157043	108.1303236	55.23509354	56.9103691
71.92	94.49967944	110.8826423	54.64019112	56.32573263
71.94	94.3429103	112.927475	54.84549398	55.80047629
71.96	94.3194236	114.6378764	55.35852462	55.68724239
71.98	94.19533118	115.8072919	56.34637678	55.59958944
72	93.55122055	116.0253383	57.51782688	55.9869552
72.02	92.59514107	115.9703469	59.02194458	56.25657599
72.04	91.52214683	115.0248802	60.74540297	56.98060876
72.06	90.21519466	113.6027768	62.58562848	57.63350996
72.08	88.64490646	111.3019557	64.24565072	57.91261199
72.1	87.17530792	108.5847689	66.04727374	57.898198
72.12	85.67428152	105.7631014	67.58179796	57.69567196
72.14	84.65421175	102.951444	68.90333603	57.69934776
72.16	84.14620487	100.3560957	70.0984326	57.51643442
72.18	84.14368591	98.21511073	71.18370917	57.20278592
72.2	84.11790778	96.23268986	72.07362827	56.58264132
72.22	84.64773587	94.19127414	72.73915361	56.24515623
72.24	86.22897361	92.31143695	73.00247548	55.78450905
72.26	87.9179371	90.53603195	73.08435636	55.66952877
72.28	89.98004348	89.1888199	73.15579836	55.25458085
72.3	92.08218121	88.06646981	73.18333603	55.08457781
72.32	94.54949034	87.08690363	72.94017899	54.4949186
72.34	96.85488421	86.58521387	72.58022146	54.0128739
72.36	99.44751138	86.85980281	71.91385681	53.83747902
72.38	101.7194549	87.29619881	71.30583072	53.7274325
72.4	103.7523592	87.84519062	70.09351299	53.48486601
72.42	105.3145293	88.34382951	68.74065426	53.17949641
72.44	106.8736404	89.03745677	67.23563758	53.4996036
72.46	108.1600101	90.242973	65.77268278	53.81372333
72.48	108.9250854	91.73719486	63.89036606	54.03613611
72.5	109.3105582	93.1444504	62.31434018	54.67007888
72.52	110.0224613	94.33551623	60.7425493	55.5644595
72.54	110.8117868	95.37420872	59.12798564	56.65346648
72.56	111.578021	96.19295581	57.27496208	57.81056629
72.58	112.0230448	96.88561533	55.58411467	59.12263626
72.6	112.4114784	97.45313075	54.18531297	60.91645869
72.62	112.6710557	97.88664375	53.09060572	62.37883305
72.64	112.8137486	97.53112549	51.99087572	64.08111336
72.66	112.3489342	96.83197593	50.69729902	66.01843159
72.68	111.3840762	95.84447669	49.4807746	68.01343412
72.7	110.3662635	94.94148549	48.45260795	69.86594297
72.72	108.9047983	94.06718172	47.27837698	71.65975731

72.74	107.4370118	93.15898878	45.89315603	73.33933664
72.76	105.2153989	92.73868339	44.60794317	74.9532976
72.78	102.7359814	91.80786834	43.46484579	76.63946911
72.8	99.94664476	90.49897361	42.44922439	78.3155132
72.82	97.51020123	89.22336536	41.62379411	79.99916068
72.84	94.86875417	88.24091819	41.02029326	81.57778137
72.86	91.80634746	86.93357872	40.71138538	82.78152392
72.88	88.92897057	85.38090707	40.62357569	83.66607341
72.9	85.84558196	83.77442512	40.77000809	84.41566185
72.92	83.0655041	82.65402973	41.11282435	84.55577915
72.94	79.64881788	81.84107392	41.72394681	84.71514916
72.96	76.5653423	81.51387704	42.16055112	84.82449287
72.98	73.20899383	81.48221155	42.95456467	84.49503084
73	70.30439478	82.12254323	43.52648903	83.71943574
73.02	67.60059662	83.43947517	44.25504904	82.71387602
73.04	65.37090403	84.42402771	45.1499909	81.41366468
73.06	63.18278997	85.23105167	46.14444231	79.57063505
73.08	61.36971888	86.09680251	46.96397614	77.63703003
73.1	60.85033775	86.29928709	48.19211852	75.60878653
73.12	61.41662352	86.76992921	49.36235514	73.4910183
73.14	62.36329963	87.04472849	50.49380928	71.13179998
73.16	64.3711983	87.86745576	51.75314996	68.7796663
73.18	66.81274952	88.99875316	53.26404389	66.52140864
73.2	69.89433411	90.04405804	54.711802	64.4670179
73.22	73.212793	90.58866215	56.3110992	62.36274446
73.24	76.73481545	90.98282941	57.705766	60.63784913
73.26	80.1908737	91.53974315	59.34599353	59.36690262
73.28	84.12057336	92.22852563	61.02141167	58.22097381
73.3	87.51405804	92.81632015	62.4375498	57.06755284
73.32	90.68544949	93.27180706	63.43180605	56.23368389
73.34	93.16481747	93.56981899	64.12719082	55.64659925
73.36	95.29844878	93.95211245	65.05003539	55.27790677
73.38	97.36379411	93.64242997	65.97144201	55.2243149
73.4	99.10964405	93.27572758	66.51236121	55.4134594
73.42	100.8261098	92.7363333	66.86476792	56.27756699
73.44	101.8055011	91.66727677	67.1581444	57.22564668
73.46	102.5404591	89.5073425	67.41737183	58.54115886
73.48	103.2439994	87.53688846	67.57605622	60.03061381
73.5	103.4695439	86.1553787	67.47449489	61.63300839
73.52	103.5556345	85.38644049	67.26283446	63.37509556
73.54	102.8479442	85.00496208	66.76403276	65.10371119
73.56	102.0910962	85.13074325	65.92827182	66.58100415
73.58	101.0298129	85.65735059	64.96351805	67.51458995
73.6	100.072886	86.3935949	63.64034483	68.4986217
73.62	99.10255435	87.07981495	62.27926787	69.83170088
73.64	98.50200829	87.39582566	60.69990292	70.7412701
73.66	98.04823946	87.80441804	59.11437456	71.10102538

73.68	97.54063404	87.90851552	57.32483972	71.52970068
73.7	97.42779958	87.54083527	55.64851856	71.59810193
73.72	97.57213975	86.85159167	53.91652847	71.65475781
73.74	98.242342	86.52470422	52.05647285	71.80200324
73.76	99.37972697	86.69924866	50.27798261	72.02053494
73.78	100.8511659	86.46099201	48.95948225	71.83036707
73.8	102.5971726	86.36994843	47.92431995	71.87267772
73.82	104.5765649	86.32546567	47.62695318	71.52318232
73.84	106.204234	87.01777531	47.44722014	71.19591162
73.86	107.274328	87.14621195	47.69240267	70.69876934
73.88	108.1849732	86.73429568	48.21363131	70.12377288
73.9	108.6946688	85.93890181	49.08494893	69.17215189
73.92	108.5644848	85.34368692	49.95443422	68.23456467
73.94	108.0656922	84.56580342	51.14114572	67.48402164
73.96	107.7139883	83.77486197	52.49334816	66.55070078
73.98	106.8160047	83.11046011	54.0842795	65.60295176
74	105.8432683	82.40679745	55.81214986	64.89896653
74.02	104.9109485	81.59448883	57.62968146	64.43775407
74.04	104.3077814	80.63692183	59.66061584	64.20565173
74.06	103.8993538	79.575766	61.46162504	64.08496511
74.08	103.5673779	79.27723026	62.81360603	63.9184599
74.1	102.873153	79.26523713	64.05309536	64.14944989
74.12	102.2891465	79.27149661	64.96351502	64.03721913
74.14	101.7007483	80.01362625	65.58863485	64.02539691
74.16	101.4125038	81.64421782	65.61760542	63.91359288
74.18	101.2386086	83.42262008	64.9853878	64.20098392
74.2	101.3196683	85.56295176	63.89305188	64.51155122
74.22	101.3973122	87.65548589	62.2217383	64.80658307
74.24	101.8008606	89.09939731	60.20646577	64.45438164
74.26	102.2501254	89.801802	58.30319951	64.33176256
74.28	102.6103115	89.78270401	56.20847305	64.46939225
74.3	103.8379351	89.34481646	54.12996258	64.53332996
74.32	105.3426595	88.88605926	51.70473759	64.5163697
74.34	106.9127303	88.99373749	49.55925372	64.79967439
74.36	107.9422196	88.71750632	47.50651229	65.19675195
74.38	109.1017585	88.27457882	45.53052483	65.60711902
74.4	109.7508686	88.13631308	43.9161533	66.65194661
74.42	110.5275043	88.03085347	42.52758823	67.32805036
74.44	110.4397512	87.99317626	41.35951259	67.97314693
74.46	110.0627455	87.16275053	40.67018809	68.39766913
74.48	109.2875356	86.94730306	40.44247548	68.86433613
74.5	107.5687582	86.91941147	40.82253211	68.9386844
74.52	104.7879502	87.11582668	41.54093639	69.30879058
74.54	101.9006745	87.19934068	42.63207402	69.49302761
74.56	98.82394681	87.82804126	44.02866013	69.54154717
74.58	95.45931136	88.94776519	45.79876226	69.89627465
74.6	92.26450197	90.51623926	47.70904844	70.66449186

74.62	89.59059157	92.33645262	49.55188796	71.41753261
74.64	86.84847406	94.49231672	51.64172212	72.07878754
74.66	83.93538376	96.92382546	53.69048337	72.63232683
74.68	81.29599555	99.23672869	55.5822702	73.28792193
74.7	79.07848013	101.6789837	57.36156133	73.91098594
74.72	77.57004551	104.247745	59.0030003	74.21034887
74.74	76.7427839	107.3651067	60.10393569	74.54241784
74.76	76.329279	110.4933472	60.51966528	74.83127212
74.78	76.3989099	113.2420902	60.65125695	75.06140661
74.8	77.04903529	115.9586045	60.25562645	74.63525432
74.82	78.20678329	118.3017767	59.62639802	74.21437355
74.84	80.22856103	120.1033168	58.90564364	73.70812418
74.86	82.98764182	121.0455253	57.97924158	73.3948559
74.88	85.70631712	121.6062949	56.88276772	72.29259986
74.9	88.87826777	121.6348862	55.81484983	71.05030539
74.92	91.92435737	121.1456002	54.73627364	69.4924684
74.94	95.13702801	120.3783719	53.94974113	68.36707655
74.96	98.56447062	119.4669269	53.10676105	67.09225402
74.98	102.537924	119.1612448	52.54540095	65.7233967
75	106.5426009	118.9532602	52.32642431	64.61162302
75.02	109.9640176	118.408375	52.25885024	63.30210132
75.04	112.2896218	117.347296	52.42509657	62.16855799
75.06	114.0390879	116.1524401	52.85620892	61.30181515
75.08	114.8396885	115.4132915	53.74751138	60.58176155
75.1	115.1397098	114.0825099	54.8931985	59.71148144
75.12	114.6765204	112.7200233	56.11079381	59.36280311
75.14	113.8691657	111.232428	57.6426939	58.91765093
75.16	112.3136465	110.2201315	59.54320053	59.10812923
75.18	109.921891	108.6464011	61.66186874	59.49227829
75.2	107.336933	107.2499838	63.79547578	59.79402973
75.22	104.6166882	105.526488	65.64939832	59.83728486
75.24	101.6625776	103.5714976	67.84853878	60.24496916
75.26	98.39135504	101.107023	69.99954596	61.19588128
75.28	94.89891192	98.3962433	71.89239155	61.70057438
75.3	90.98508848	95.52173931	73.65427141	61.87167863
75.32	86.81656285	92.08985944	75.24777935	62.40231065
75.34	82.92434018	88.39930731	76.39282637	62.84032056
75.36	78.74974821	84.65411973	77.170901	63.13322985
75.38	75.03151077	81.18381232	77.68378097	63.2055314
75.4	71.37576297	77.81701992	77.70607139	62.90562544
75.42	68.37044595	74.80412377	77.22704925	62.56513196
75.44	65.54498534	72.11462231	76.45988472	62.0583871
75.46	62.9402882	69.88440287	75.63561735	61.36464253
75.48	60.18832541	68.0941895	74.85080089	60.3255405
75.5	58.39265851	66.85526039	74.17701588	59.29814541
75.52	57.57454849	66.42849429	73.38995348	58.24727677
75.54	57.71154414	66.9115047	72.27817373	57.22354333

75.56	58.33925271	68.41999393	71.15545556	56.00744666
75.58	59.44614218	70.92313884	69.74876428	55.33817777
75.6	60.82906765	73.74935484	68.26010517	55.06153504
75.62	62.31491253	77.18076954	66.64159066	55.18197391
75.64	64.90351704	81.16416422	65.02848822	55.58001315
75.66	68.10823036	85.90509152	63.53156234	56.02555567
75.68	71.42078774	90.16483972	61.94689554	56.71248357
75.7	74.93255233	94.22923653	60.09462433	57.53548792
75.72	78.17458691	98.07805339	58.55582263	58.9399636
75.74	81.55469208	101.5322328	57.08879159	60.52418647
75.76	84.87531601	104.5137891	55.79187481	62.36170189
75.78	88.29945394	106.3652017	54.51906967	64.40719891
75.8	91.95901001	107.6324381	53.4290272	66.52470523
75.82	95.57973506	108.1392881	52.80888462	68.78244008
75.84	98.90206492	107.6293174	52.55093437	71.19428355
75.86	101.652885	106.0486035	52.47856507	73.15097381
75.88	104.4839883	103.7068561	52.85326221	74.73578218
75.9	106.8687653	100.2044747	53.20997978	76.51609465
75.92	108.6089059	96.12463242	53.68529983	78.87301648
75.94	110.031713	91.59584387	54.13582465	80.38800991
75.96	110.3614774	87.31771564	54.43499848	81.33658105
75.98	110.6427445	82.72736778	54.9382344	82.21147234
76	110.3024573	78.31506219	55.28567398	82.85914956
76.02	109.8496815	74.22539084	55.52268581	82.7483335
76.04	108.5865598	70.68147437	56.32115583	82.28142077
76.06	107.2358065	67.81895237	57.37354232	81.47590454
76.08	105.6759389	65.5572343	58.4945859	80.21862271
76.1	104.6201072	64.73310446	59.51856002	78.66502781
76.12	103.873516	65.16455354	60.4964415	77.25695015
76.14	102.7456881	66.45637678	61.34273941	75.56100718
76.16	101.7472545	68.55766812	62.23694914	73.9052523
76.18	101.7264405	71.76797654	62.88194661	72.27805036
76.2	102.0743917	75.74689857	63.52083729	70.92014562
76.22	102.4986399	80.78025382	63.9015138	69.75924664
76.24	102.7037668	86.22701385	64.24685711	68.58830721
76.26	102.0176246	91.94422085	64.4659096	67.5056396
76.28	101.1642684	97.75477804	64.54207604	66.51916372
76.3	100.8106017	104.2688957	64.46034281	65.70465366
76.32	100.8712883	110.1398746	64.60453838	64.91105066
76.34	100.7667095	115.6781798	64.70389827	64.28599454
76.36	100.3638952	120.3004955	64.92521792	64.17505006
76.38	100.1848064	124.3518566	65.07926181	64.40396805
76.4	99.87771059	127.6791111	65.33108403	64.77362524
76.42	99.44748913	130.3349378	65.26423703	65.34874608
76.44	99.02255941	131.8416786	65.07401153	66.19044898
76.46	98.84018	132.4076813	65.1872434	67.15515725
76.48	99.23989686	131.6324411	65.19827991	68.45731419

76.5	99.57749722	129.8157347	64.40619476	69.8781535
76.52	99.71640004	126.9273476	63.30505309	71.27189402
76.54	100.3199828	123.1733401	62.12413692	72.34228436
76.56	101.4288775	118.9295146	60.87465366	73.55309435
76.58	103.034689	113.9130023	59.2369997	75.15313075
76.6	104.9064698	109.0456042	57.49628274	76.30079381
76.62	106.9397583	103.6786996	55.69632824	76.52075134
76.64	109.0028254	98.54894529	53.91190818	77.00135605
76.66	111.1823086	93.66176964	52.18777834	77.61449995
76.68	113.2605491	89.25569117	50.37337648	78.13762666
76.7	115.9758388	85.01703307	48.66851856	78.26785216
76.72	118.6543715	81.12391243	47.32250076	78.24861563
76.74	121.0434078	77.60263828	45.85499646	77.81780767
76.76	124.0997411	74.95327333	44.57269997	77.41212458
76.78	127.2360218	73.30125392	43.54397411	76.78052381
76.8	129.5907139	72.24708363	42.74104257	76.47927091
76.82	131.1599575	71.56122156	42.31276671	75.85741935
76.84	132.2975013	71.29436546	42.27373546	75.1275852
76.86	133.2796208	71.83021438	42.84902619	74.12810497
76.88	134.0085216	73.10916574	43.86270503	73.22175346
76.9	134.2772778	74.7451441	45.07092123	72.35555365
76.92	134.3734685	75.79766508	46.9053332	71.14501871
76.94	133.2604166	77.06276772	49.1207837	69.96521691
76.96	131.7670867	78.15863384	51.66661139	68.72068864
76.98	130.0198605	79.2734412	54.44941248	67.52579937
77	127.4671524	79.79788351	57.34027	66.5157023
77.02	124.6907291	79.91948731	60.08215391	65.64132167
77.04	121.9284296	79.94874406	62.88216099	64.72825766
77.06	119.7603367	79.53323895	65.44898574	63.75970573
77.08	117.4820235	78.44659318	67.63184852	62.87530387
77.1	114.9188148	77.07207706	69.25607645	61.94037921
77.12	112.3408545	75.4281889	70.99137223	61.08721509
77.14	110.1857842	73.6659187	72.69293255	60.32587724
77.16	108.0336121	71.62324805	73.4316847	59.7399373
77.18	105.2759207	69.59983922	73.44768227	58.83967742
77.2	102.6193427	67.59555365	73.49152189	57.58385883
77.22	100.0396714	65.8151168	73.28460613	55.98066134
77.24	97.56860552	64.29920214	72.76647487	54.72838507
77.26	94.80997674	62.91555971	72.06195874	53.44813126
77.28	92.43083831	62.12903529	70.7300991	51.44161594
77.3	90.43157448	61.71665487	69.06529174	49.68336536
77.32	88.362252	62.05388917	67.14401153	48.34827283
77.34	86.23741329	63.09745576	65.22178582	47.21163616
77.36	84.88092123	64.37571645	63.25734452	46.11480332
77.38	83.60988978	65.72979776	61.34368187	45.12011427
77.4	82.16750126	67.39987966	59.52478309	44.47107898
77.42	80.70905552	69.30188391	57.97311356	43.85421782

77.44	79.72496916	71.70967439	56.63587926	43.64045101
77.46	78.70163111	74.19470523	55.71001315	43.71545151
77.48	77.89781171	76.74628476	54.91471939	44.4369906
77.5	77.83468804	78.96594701	54.48712711	44.96888664
77.52	78.16442613	80.79971585	54.36796643	45.67357063
77.54	78.38609768	82.86291941	54.5191445	46.90649611
77.56	79.16333401	84.64524421	54.86086662	48.80927697
77.58	79.75539185	85.80383962	55.30385277	50.94795126
77.6	80.40911518	86.14143796	55.77188897	53.25066943
77.62	80.77034281	86.08797047	56.28177773	55.85175751
77.64	81.58399838	85.77152897	57.15098696	58.57689251
77.66	82.65822732	84.70372535	57.75693498	61.52625544
77.68	83.55284154	82.99253615	58.18869148	64.40221458
77.7	84.32774092	80.71251795	58.3468652	67.38977551
77.72	84.82332693	78.58266963	58.68837395	70.73376883
77.74	84.86072707	75.73533724	58.82327839	74.13762564
77.76	84.13097482	72.65199616	58.74852058	77.18557589
77.78	83.27966326	69.83544241	58.57227424	79.72316817
77.8	82.10098696	67.09475579	58.42983315	82.19468096
77.82	80.73213773	64.32162099	58.2084235	83.94822227
77.84	78.6566124	61.77272121	57.36804834	85.26924057
77.86	76.25438265	59.24058348	56.33209627	85.89437051
77.88	74.0542704	57.26918394	55.27921731	86.06328547
77.9	71.77474568	55.41487815	54.28085853	86.30708464
77.92	69.69545252	53.90941551	53.31774396	86.22048741
77.94	67.95885125	52.64887451	52.34618869	85.95263727
77.96	66.72945394	51.50107089	51.21732228	85.38865709
77.98	65.29395187	51.14283446	50.50767924	84.85537163
78	63.81213065	50.96479017	50.01765093	83.92270604
78.02	62.4626575	51.02672869	50.09631004	82.79840227
78.04	61.30077864	51.1287026	50.55796137	81.94917585
78.06	59.95257761	51.58209121	51.35484579	81.12869046
78.08	59.11714734	52.86906563	52.41986753	79.89557387
78.1	58.76335019	54.1945222	53.75147133	78.34207402
78.12	58.86050561	56.2323784	55.18346648	77.14293457
78.14	59.2871261	58.62299727	57.01451512	76.00633734
78.16	60.31996865	61.24793103	58.91603802	74.72711397
78.18	61.48075033	63.85485893	61.08674992	73.25272222
78.2	63.15456467	66.79273738	63.14046415	72.26216908
78.22	64.86418546	70.23984629	65.53370513	71.69793407
78.24	67.41508039	73.56916169	67.78662352	71.4509728
78.26	69.7944231	76.58474972	69.30744261	70.96048134
78.28	72.3591172	79.36665082	70.64060168	70.80269289
78.3	74.61637577	82.09393973	72.20915765	70.62349681
78.32	76.61196885	84.86329255	73.82163111	70.39288199
78.34	78.30512185	86.8440004	74.79304985	70.09429366
78.36	80.13038224	89.04286783	75.59797452	69.64126605

78.38	82.17375872	91.15869957	75.94250076	69.16594499
78.4	84.17371726	92.97610072	75.94398119	68.32340075
78.42	86.68183942	94.25574376	75.52552331	66.86244008
78.44	89.40241177	95.52127718	74.53139246	65.33221256
78.46	92.83081505	96.49934473	73.12834058	63.80772879
78.48	96.54641521	97.78418849	71.46725756	62.62154111
78.5	100.3350025	98.79467085	69.41651026	61.68741228
78.52	104.1846193	99.73060876	66.8124957	61.21279806
78.54	108.2656962	99.84483466	64.00154212	61.01052179
78.56	111.9685125	100.019102	61.35932652	60.92754677
78.58	115.3412044	99.74388512	58.71731621	60.87091314
78.6	118.6938204	99.28008899	56.11885833	60.77218121
78.62	121.7555688	98.28929922	53.75928001	61.30874001
78.64	124.3376449	97.2159187	51.483964	62.15712913
78.66	126.7920386	96.31343109	49.26433006	62.7799909
78.68	128.9566872	95.03643139	47.3187208	63.36151583
78.7	130.2700496	93.38699464	45.75458995	64.33940944
78.72	131.4469643	92.18228941	44.48745273	65.82534736
78.74	131.8714723	91.22039337	43.37583881	67.21228638
78.76	132.4261058	90.56889473	42.45329457	68.72708059
78.78	132.3486156	89.43162302	41.97353221	70.6044413
78.8	132.2416695	88.47288806	41.76116695	72.74134088
78.82	131.3589615	87.11925473	42.14641622	75.21068763
78.84	130.4301274	85.87942562	42.41327536	77.51667712
78.86	128.9286338	84.44614521	43.00474972	79.45480433
78.88	127.2201871	83.24669532	43.99232177	81.59102134
78.9	125.198921	82.03263525	45.33114774	83.32374254
78.92	122.9690262	80.74230357	46.2347204	84.83362018
78.94	120.6377096	80.08699869	46.97056831	86.15066842
78.96	118.8159571	79.8520356	48.16914552	87.2008828
78.98	116.8425351	79.52578623	49.56203357	87.56238346
79	115.1471079	79.51538477	50.85575083	87.40475478
79.02	113.6647012	79.72618869	52.27403782	87.06734756
79.04	112.5139418	80.50129032	53.73300334	86.5880544
79.06	111.5597118	81.73530185	54.90527455	85.7668288
79.08	110.4308191	82.99582769	56.02119325	85.16587521
79.1	109.7178865	84.41447871	57.222703	84.45728891
79.12	109.399281	86.35889574	57.91538882	83.86015067
79.14	109.3358226	88.34488624	58.39548589	83.11701183
79.16	108.9857094	90.48613611	58.68996258	82.40483972
79.18	108.8102953	91.86992112	58.73930933	81.79574982
79.2	108.8253544	93.4927748	59.05414299	81.09133381
79.22	108.3941592	94.69429973	59.62994641	80.31529275
79.24	107.4133381	96.53810092	60.26777834	79.39830923
79.26	106.588288	97.63213571	60.79030943	78.11808676
79.28	105.396214	98.66263828	61.41260188	77.05364445
79.3	103.9313308	99.46336434	62.02844474	76.25298918

79.32	102.2305713	100.3373364	62.75892507	75.79905046
79.34	99.78583072	101.1426262	63.81096572	74.88998382
79.36	97.28517848	101.8394479	65.10153706	73.96970169
79.38	94.51598038	102.16297	66.44134088	73.07866619
79.4	91.95207807	103.016759	67.8958742	72.29397614
79.42	88.84112347	103.7605086	69.39107291	71.67231874
79.44	85.8486035	104.2657286	70.69867833	70.86666195
79.46	82.47497522	104.1414845	72.0285044	69.92377187
79.48	79.5360633	104.3166893	73.07598847	69.10935585
79.5	76.54280311	104.1911518	73.89577207	68.3598918
79.52	73.95773283	104.343243	74.33292345	67.20749317
79.54	71.7386308	104.5560461	74.87681565	66.16957832
79.56	70.09864698	104.4279887	75.4030003	65.33303469
79.58	68.94375973	104.0787299	75.76095156	64.21142077
79.6	68.11138133	104.2216857	75.72962484	63.03312671
79.62	67.68094752	104.3443007	75.67000101	62.01741834
79.64	67.59802912	104.3854717	75.49524118	60.72852563
79.66	67.39781879	104.4552614	75.19067044	59.39870159
79.68	67.53152088	104.6694772	74.82351299	58.54986652
79.7	68.29025179	104.7018445	74.26117504	57.95667813
79.72	69.48037618	104.4569512	73.10468804	57.59891293
79.74	71.003964	103.9871999	71.9122166	57.27111943
79.76	73.08908686	103.1599343	70.66280918	57.2450177
79.78	75.68982607	102.3682314	69.68976641	57.18051977
79.8	78.27070482	101.9488401	68.54333097	56.88684195
79.82	80.79167054	101.2465537	67.44220144	56.86711194
79.84	83.61865204	100.281621	66.23705329	56.92790575
79.86	86.70051977	98.85866923	65.16791789	56.79292648
79.88	88.56485691	98.1326666	64.48825968	56.73599757
79.9	89.21596724	97.30126605	63.9422611	56.60919405
79.92	89.4789008	96.61364546	63.34636161	56.44947619
79.94	89.3246395	95.79310749	62.8832612	55.64722419
79.96	88.4098645	95.56115886	62.24090909	55.07254727
79.98	86.81861766	95.29320154	61.64499343	54.63292648
80	84.81672363	95.79407928	61.2060815	54.14082718
80.02	82.23368288	96.35927091	60.61919709	53.20306401
80.04	79.6547568	96.71755081	59.96746284	52.07604712
80.06	76.94887754	97.05771564	59.15998079	51.13580241
80.08	74.20095662	97.79300839	58.66087269	50.44042269
80.1	71.41484882	98.39236424	58.16665184	49.91210739
80.12	68.84324906	98.69233492	57.37521185	49.18541106
80.14	66.71015977	98.78356254	56.55056629	48.84326626
80.16	64.91798665	99.02307615	55.92628779	48.72597128
80.18	63.36416422	98.94696026	55.44356457	48.38767924
80.2	61.70100516	99.15696633	54.88721205	47.95325412
80.22	60.57074628	99.06557286	54.64710992	47.77236222
80.24	59.89041359	99.04602184	54.76404894	47.66196279

80.26	59.79835676	98.97055921	55.0619547	47.67786834
80.28	60.62960158	98.73785014	55.41572353	47.93605926
80.3	62.43947821	98.04573162	55.89651734	48.42641015
80.32	65.33357266	97.90375872	56.74954495	48.96756598
80.34	68.87895035	97.90536859	57.89181818	49.89462736
80.36	72.90959956	97.31654768	59.29053595	51.06393265
80.38	77.43028415	96.15883001	60.63101426	52.26859642
80.4	82.40077763	95.15633027	61.88883709	53.47319749
80.42	87.77963697	94.28545455	63.50846294	54.70495399
80.44	93.04617959	93.48995652	65.19031854	55.6121802
80.46	97.73655476	92.93094651	67.14437051	56.54109617
80.48	101.6485236	92.67458085	68.92942562	57.24203458
80.5	105.5755931	92.0738376	70.21885732	58.03906158
80.52	108.9824633	91.26997067	71.12225806	58.43769137
80.54	110.9258338	90.36262514	72.12756396	58.52797148
80.56	111.6157235	90.30960057	73.03256345	58.45721913
80.58	112.242432	89.83250076	73.69029831	57.76084437
80.6	112.7542603	89.48060876	74.23397816	56.74147335
80.62	112.3353008	88.92050865	74.43916978	55.22951259
80.64	111.0838669	88.32759834	74.37973	53.89650319
80.66	109.504507	87.49759329	74.24607139	52.6737749
80.68	107.5290242	87.1981171	74.16751744	51.30778137
80.7	105.2560754	86.17384366	73.78822126	50.14065628
80.72	103.1067894	84.62189807	73.50716048	48.62267772
80.74	101.4110709	83.291802	73.23139347	47.24396501
80.76	99.78387906	82.31565275	73.17714329	45.60816564
80.78	98.3118738	81.77764081	72.43967944	43.82029528
80.8	96.93393467	81.76911518	71.35446759	42.15458287
80.82	96.23041157	82.23161897	70.51787036	40.54558499
80.84	95.87114875	82.91550308	69.80320154	38.92410658
80.86	96.2250359	83.32784205	68.91572151	37.20910709
80.88	96.96167459	84.03691576	67.94294367	35.96893215
80.9	98.45075033	85.12546567	67.07277581	35.27715441
80.92	100.6072201	86.41108302	66.33540095	34.93509859
80.94	103.3344615	87.20294469	65.35474365	34.91751744
80.96	106.455674	87.98680655	64.37867024	35.21959147
80.98	109.914145	89.52562746	63.2533603	35.92786126
81	113.3419294	91.57672768	62.42294367	37.07568005
81.02	116.1402902	93.37598038	61.27827485	38.61619881
81.04	118.5241855	94.88438265	60.07444534	40.22589847
81.06	120.8971655	96.75226615	58.33636667	42.00197998
81.08	122.7572798	98.93015775	56.4392254	43.75307008
81.1	123.9207837	100.5382809	54.60265446	45.70074932
81.12	124.0457074	101.9022945	52.72511579	47.56654363
81.14	124.1776924	102.7466154	51.0759096	49.57536455
81.16	123.257744	103.3464779	49.30002528	51.15072505
81.18	121.7407139	103.0933542	47.59319951	52.71106684

81.2	118.9713186	102.8678653	46.2488017	54.23814643
81.22	115.3553645	102.4990899	45.02994843	55.15272727
81.24	111.5917504	101.9796734	44.23321974	55.81047528
81.26	107.5381404	100.6131581	43.97946708	56.24160077
81.28	102.7167095	99.17672768	44.07488523	56.8381626
81.3	97.32789564	97.04411771	44.22378906	57.27334007
81.32	91.92582971	94.89444939	44.59138538	57.44493882
81.34	86.79369299	92.85330569	45.18074527	57.37473051
81.36	81.80794317	91.31561027	45.87155729	56.93572758
81.38	77.08203964	89.3185853	46.43731419	56.23376883
81.4	72.78978562	86.96690262	47.53942461	55.22566589
81.42	69.35373749	84.51713419	48.71464658	54.25903833
81.44	66.54791485	82.07620285	49.84255941	53.22082819
81.46	64.10999494	79.61745273	50.90107999	52.23108504
81.48	62.53244817	77.2515492	52.12834968	51.81299424
81.5	62.01597229	74.83853878	53.50851047	51.10204672
81.52	61.97126605	71.92552634	54.79074729	50.61636263
81.54	62.70940641	68.91400344	56.09556174	50.28652442
81.56	63.27441298	66.37213571	57.48802811	50.43597431
81.58	64.17518455	64.29443321	58.70123976	50.72869754
81.6	65.65027101	62.22390434	59.5824775	51.63875518
81.62	67.90602386	60.47295985	59.96442815	52.72933563
81.64	70.38745475	59.05764587	60.47080696	54.10708565
81.66	73.28323895	58.18845283	61.02687228	55.83066336
81.68	76.49237334	57.22357468	61.75640307	57.81894833
81.7	79.73239559	56.02103549	61.98255031	59.92338356
81.72	83.28933057	55.12473961	61.95421478	62.07420063
81.74	87.1184771	54.29290323	61.83135201	64.18260491
81.76	89.92208515	53.62291435	61.47970472	66.48713014
81.78	92.88858125	53.06202852	61.04734857	68.85484983
81.8	95.79364648	52.72404591	60.34756396	71.06172616
81.82	98.58324603	52.34426029	59.82777733	72.96251188
81.84	100.0962433	52.50109819	59.17758924	75.07692689
81.86	101.0409475	52.8688563	58.59336131	77.44880473
81.88	101.710001	53.98122763	57.61395692	79.56657094
81.9	102.2710385	55.25629184	56.3764142	80.95082819
81.92	102.7208686	56.79973405	55.53325412	82.15393265
81.94	102.8825493	58.8037567	54.82295176	82.82661139
81.96	102.6369178	60.66182425	53.72023056	83.36685408
81.98	102.1882243	61.96567499	52.55047528	83.30510668
82	101.8166437	63.46304277	51.41843058	83.27454444
82.02	101.4407321	65.20697947	50.30728082	82.94518758
82.04	100.7773536	66.64866923	49.24842047	82.10040752
82.06	99.71064718	67.56443725	48.50717059	80.9839913
82.08	99.15435737	67.82149055	47.99193548	79.85746183
82.1	98.46648701	67.94981495	47.37332086	78.3053514
82.12	97.14269997	68.12128324	46.9158196	76.70816159

82.14	95.82209425	68.63070381	46.77544747	74.87486601
82.16	94.25827991	69.34473455	46.81703206	73.25142583
82.18	92.43392254	70.17912934	46.84101527	71.3660987
82.2	90.56061988	70.94856811	46.99448074	69.94934877
82.22	88.58583072	71.55368794	47.46988573	68.45493478
82.24	85.72174841	72.41188189	48.09594196	67.11028213
82.26	83.55582263	73.62955911	48.66280918	65.87178077
82.28	81.95197391	74.27261705	49.0660987	64.6316756
82.3	80.23822126	74.7052432	49.27626656	63.15642633
82.32	78.49760441	74.96945798	49.59998382	61.96108808
82.34	77.01800991	75.33145616	49.74448175	60.93669127
82.36	75.77250379	75.77297199	49.5426039	60.18999596
82.38	74.93819294	75.99627364	48.98131763	59.26355243
82.4	74.21483466	76.68249975	48.53541511	58.43705936
82.42	73.85122257	77.81419759	48.15714936	57.51996562
82.44	73.26039539	79.83143695	47.29871271	56.80132167
82.46	73.54356962	81.92109718	46.67494388	55.83226818
82.48	73.60019112	84.12674082	45.7624057	54.54571848
82.5	73.41598038	86.50572758	45.07219335	53.30814845
82.52	72.82120336	89.15998584	44.17455961	52.35216402
82.54	72.28248357	91.97015067	43.10394276	51.2265133
82.56	72.05753362	94.39947214	41.88427849	50.17568106
82.58	72.05223076	97.12243705	41.04847507	48.97807867
82.6	72.31427546	99.51705531	40.62309232	48.23037314
82.62	72.77558095	101.4635231	40.38966832	47.45448377
82.64	73.97413186	102.4697978	40.08412276	46.92354434
82.66	75.38885327	103.3382132	40.11627364	46.68357872
82.68	76.92307311	104.0585732	40.38142583	46.77749115
82.7	78.28919405	104.6883851	40.99020629	46.66711498
82.72	79.62721408	105.1146638	41.91472343	46.53184447
82.74	81.203694	105.3608717	43.0532521	46.74755385
82.76	82.71514612	105.1220356	44.32220346	47.21777126
82.78	83.85683386	105.1911204	45.74833047	47.64207807
82.8	85.04143594	104.9409253	47.62022753	48.45507635
82.82	86.04060269	104.3419102	49.76700475	49.40356254
82.84	86.99381535	103.1713813	52.01676408	50.63527657
82.86	87.87097381	101.3955668	54.05092123	51.87821923
82.88	88.69330468	98.97228436	56.43675599	52.93478309
82.9	88.89067145	96.25113561	58.59521893	53.81581758
82.92	88.97235312	93.43594499	60.66322783	55.06285873
82.94	89.62963191	90.48405501	62.48503489	56.24811811
82.96	90.31647487	87.21319244	63.78464557	57.32161897
82.98	91.22490747	84.36542724	64.59713722	58.33243806
83	92.25751643	81.70199717	65.41696127	59.33422894
83.02	93.0613156	79.42388411	65.9975852	60.34776722
83.04	93.59985944	77.40442512	66.55197796	61.35369906
83.06	93.87556275	75.27135706	66.92118617	62.03352007

83.08	93.61692385	73.8271625	66.78005663	62.76135403
83.1	93.00172515	73.0969188	66.47444635	63.52766104
83.12	92.02282334	72.62136414	65.7040358	64.44946304
83.14	90.88366569	72.011982	64.9186399	65.41755385
83.16	89.11151178	71.38315502	64.01088786	66.54262312
83.18	87.38696228	70.752703	62.93815249	67.93870058
83.2	85.74187481	69.92966326	61.41430984	69.73182931
83.22	84.50003843	69.69644757	59.73649206	71.59277581
83.24	83.7984326	69.38847406	58.07966731	73.62133987
83.26	82.89122358	69.32691071	56.65192638	75.47478208
83.28	82.40702498	69.22618566	55.31	77.26326828
83.3	82.41153605	69.0301982	53.83699464	78.40164526
83.32	82.9106755	69.19755385	52.17386187	79.32877642
83.34	83.38273637	69.39039842	50.76006977	79.94090909
83.36	83.89811811	69.5769997	49.57122055	80.0121893
83.38	84.82010618	70.07451107	48.79637274	79.66524219
83.4	85.66424108	70.10335828	48.34424917	79.00689857
83.42	86.39766407	70.08351805	47.9110537	78.17170695
83.44	87.05114066	70.23039236	47.84324704	76.89596319
83.46	87.24651835	70.38048337	47.66441905	74.9892345
83.48	87.41590353	70.1596663	47.89016989	72.82432096
83.5	87.38358479	69.77650925	47.90297907	70.32618162
83.52	87.84424714	69.49770654	48.0245859	67.73400748
83.54	88.09239155	69.11905451	47.9250723	64.83248256
83.56	88.39246233	69.2031085	47.73713318	61.98807463
83.58	88.3940358	69.75445141	47.41245323	59.45688239
83.6	87.96837193	70.01373445	47.32890282	56.90458995
83.62	87.32926585	70.76933563	47.09528163	54.07928709
83.64	86.7862342	71.73471837	46.85977045	51.3538467
83.66	85.86137729	72.95135807	46.50854485	48.55539488
83.68	84.38257761	74.40395389	46.44088887	46.17945899
83.7	82.13465366	76.08201335	46.39816968	44.3038467
83.72	79.64920012	77.53209222	46.24213065	42.78546567
83.74	76.82162807	79.08094044	45.90301851	41.49788856
83.76	74.62663566	80.80975629	45.75025988	40.5515674
83.78	72.35404389	82.52881687	45.58510668	40.2214056
83.8	70.59933461	84.15909698	45.5307119	40.31865204
83.82	68.94305997	85.75386895	45.64487006	40.58164021
83.84	67.34029022	86.45995045	45.93439175	40.88967641
83.86	66.20039236	86.81241885	45.87581555	41.01305794
83.88	65.5139367	87.34677925	45.89517039	41.29120841
83.9	65.37216099	87.79525028	45.97702801	41.035225
83.92	65.64100212	87.47365558	46.33149156	40.75711295
83.94	66.19603701	86.56393366	46.96161796	40.57849934
83.96	67.60713419	85.80534028	47.61513904	40.37605521
83.98	70.20944888	84.63743958	48.51419962	39.68358277
84	72.75803721	83.75139852	49.63809789	39.06388209

84.02	75.4231803	82.60057842	50.9500991	38.30717363
84.04	78.17029123	81.63331783	52.3870543	37.58739913
84.06	81.35948428	79.90566084	53.79784205	36.80534331
84.08	84.34548893	78.02915765	55.23996258	36.21639498
84.1	87.70439276	76.69822429	56.27873192	35.51957023
84.12	91.14304682	75.44398422	57.30013753	34.70314895
84.14	94.22416827	73.88271514	57.85271109	34.13066437
84.16	97.44332491	72.60693599	58.54240671	33.76764081
84.18	100.7142562	71.37174436	58.85465163	33.43604308
84.2	104.4609617	69.81577308	59.12456669	33.16896046
84.22	107.799275	68.39334109	59.09330974	33.12488624
84.24	110.5074608	67.55424714	59.15180504	33.54255031
84.26	112.4588907	66.98382344	59.20279604	33.94551623
84.28	114.3364243	66.70758621	59.09263525	34.57101021
84.3	115.5659329	67.0653878	58.78528365	35.73885024
84.32	116.5857761	67.75244817	58.55830519	37.04833047
84.34	116.8894691	69.09303772	58.4008919	38.71134493
84.36	116.8574082	70.45461422	58.42538679	40.70234402
84.38	115.7398513	72.05551825	58.11175144	43.06695217
84.4	114.6667884	73.85351704	57.62830114	45.57614622
84.42	113.0374436	76.08351704	57.00605926	48.1480989
84.44	111.6265184	78.38304176	56.5200991	50.89832339
84.46	109.4020892	81.14222267	55.51798766	53.85224694
84.48	106.8331934	84.13031146	54.72555971	56.8491799
84.5	103.531618	86.37903529	53.49764587	59.49273435
84.52	100.0061644	88.17268278	52.38401153	62.07163212
84.54	96.93381029	90.44193447	51.07585297	64.51155627
84.56	94.19943574	92.90969866	49.93042168	66.51805946
84.58	91.94982202	94.95034887	48.78691374	67.93079583
84.6	89.43485792	96.8526575	47.68509152	69.50969562
84.62	87.69493579	98.20757003	46.67525635	70.81685711
84.64	86.73461523	99.69071494	45.56006977	71.64203054
84.66	86.82368086	100.5612944	44.59925271	71.99586106
84.68	86.90531803	101.389642	43.48177268	72.04383962
84.7	88.24913743	101.7452543	42.36242492	71.27663363
84.72	90.9773698	101.4639286	41.31045101	69.97919203
84.74	94.67694206	100.1600769	40.25785924	68.3307564
84.76	98.80506522	98.80611184	39.32065527	66.2672161
84.78	103.6082556	97.02310345	38.30531399	64.00115886
84.8	108.323872	94.63114268	37.5415856	61.61376985
84.82	112.5399808	92.16318738	37.03820407	59.19220953
84.84	116.9426353	89.92286177	36.87318536	56.47708059
84.86	121.557746	87.59824249	36.76389726	53.76368187
84.88	126.2976691	84.85208009	37.26682577	51.27717868
84.9	129.6137749	82.45706947	38.07477096	49.03334109
84.92	132.799551	80.35961877	39.15829609	46.44810901
84.94	135.6235565	78.26496714	40.38655779	44.06201436

84.96	138.4220467	76.16186672	41.34289817	41.95595005
84.98	140.3387612	74.42368794	42.38608858	40.06078977
85	141.4604803	73.14109819	43.47837698	38.10276267
85.02	141.344054	72.27619476	44.59206492	36.65869046
85.04	140.0558368	71.31805542	45.26290727	35.44721711
85.06	137.1944008	70.60847305	45.65761048	34.773604
85.08	133.6205673	69.9287835	45.99483972	34.38164728
85.1	128.9618445	69.42519365	46.1643695	34.18660026
85.12	124.067023	69.4204864	46.35676408	34.51855799
85.14	118.4712094	69.62362423	46.09696936	34.94691273
85.16	112.3422237	69.60678431	45.78928911	35.48856912
85.18	106.33622	69.26941753	45.31382445	36.48292345
85.2	100.8762908	69.06574477	45.08112145	37.84893923
85.22	95.87363737	69.08725756	45.00196481	39.19421782
85.24	91.09496511	69.15899889	44.83555365	40.43315502
85.26	87.04259784	68.98612094	44.83703206	41.75435838
85.28	83.8302791	68.13672464	44.75489837	43.21459804
85.3	82.02221054	67.00374153	44.91656184	44.60066539
85.32	81.16888968	65.84866215	44.95658408	46.08369603
85.34	81.03137122	64.08450096	45.29389524	47.61172212
85.36	81.41942057	62.38592881	45.95173122	49.04414602
85.38	82.64551522	60.70367782	46.69170088	50.55879968
85.4	84.18550814	58.70508343	47.35768025	52.34833249
85.42	85.93037921	56.48455658	48.24738396	54.44106785
85.44	87.74259885	54.34695925	49.49140864	56.72143291
85.46	89.42053292	52.49726059	51.1248286	59.25639802
85.48	90.77321064	50.62155223	53.04330266	61.83228031
85.5	91.8302791	49.21083932	54.84078269	64.47656184
85.52	93.5012883	47.86912428	56.57651128	66.85481242
85.54	95.16348468	46.49403276	58.41892406	69.08931945
85.56	96.79478613	45.36050359	60.07311457	71.02947619
85.58	97.41808676	44.83899181	61.55297098	72.4149277
85.6	98.18902821	44.64295075	62.71548387	73.59711093
85.62	98.43906361	44.70772373	63.63729396	75.101351
85.64	98.4137749	45.01785924	63.97169683	76.2570452
85.66	97.50159672	45.97236829	64.47886844	77.11571039
85.68	95.61113965	47.11348468	64.66691172	77.61018708
85.7	93.61391546	48.54597937	64.45108403	77.72583072
85.72	91.24814036	49.81789261	63.7984053	77.30130852
85.74	88.72926383	50.99143796	62.96950349	76.44843159
85.76	86.29157144	52.18104358	62.07723026	75.29784002
85.78	83.86207706	53.68088078	61.31778036	74.18102437
85.8	81.8671625	55.42612094	60.57222773	72.97665993
85.82	80.12555162	56.90690666	59.68387501	71.1667388
85.84	78.75099808	57.99088887	58.73091314	69.18404085
85.86	78.29473759	58.86059561	58.12775205	67.14609667
85.88	78.2141804	59.60938922	57.66885327	64.86319749

85.9	78.26048842	60.38978259	57.33591971	62.19511983
85.92	79.00075033	60.92684498	56.70977551	59.31581555
85.94	79.99592072	61.11280716	56.27108707	56.26724542
85.96	80.87506624	60.88577207	55.83718172	53.65888664
85.98	81.61715947	60.65051067	55.47949843	51.44587825
86	82.4760987	60.00940843	55.33725351	49.54394074
86.02	83.32475579	59.41876934	55.59118819	48.08371928
86.04	83.82372232	59.11367479	56.24608049	47.31002528
86.06	84.14767722	58.89820305	56.76547578	46.811171
86.08	84.53461725	58.25111174	57.36456871	46.6825311
86.1	84.99037516	57.60030337	58.36664577	46.90419254
86.12	85.46721003	57.48463242	59.52265548	47.09466073
86.14	85.86518354	57.31532915	60.66964506	47.45662858
86.16	86.03284761	57.12244413	61.57664678	48.36995854
86.18	85.75414198	57.33216402	62.42711194	49.56825766
86.2	85.73992112	57.87407726	63.24327232	51.11541106
86.22	85.23313884	58.59928001	63.97898574	52.66089291
86.24	84.41153201	59.89713116	64.58633937	54.21260289
86.26	83.09835575	61.45534938	65.29887552	55.54125493
86.28	82.1104237	62.95154313	65.53665082	57.04192739
86.3	81.33168571	64.42119223	65.28925271	58.46375265
86.32	80.80733947	65.61668217	64.61192032	59.72182627
86.34	80.181622	66.94573364	63.81081808	60.81755486
86.36	79.63839215	68.20420366	62.55202043	61.67797957
86.38	79.09122864	69.67935079	61.03895035	62.31311053
86.4	78.53902215	70.60593791	59.30607645	62.88392355
86.42	78.40429366	71.47719587	57.52636667	62.98802811
86.44	77.79793508	72.10506826	55.74465669	63.18460613
86.46	77.36540196	73.08080493	53.9777025	63.11955001
86.48	77.00745879	73.70175953	51.87159773	62.36563859
86.5	76.68614926	73.91704824	49.48162807	61.30320457
86.52	76.27430478	73.90786429	47.01096976	59.92680453
86.54	75.67536252	73.54646375	44.78511174	58.43044797
86.56	74.56102538	73.04313985	42.49461017	57.09057741
86.58	73.49950551	72.66770654	40.29501871	55.5868015
86.6	72.54004146	72.36905451	38.28929518	54.2310719
86.62	70.94591465	72.36306704	36.82125493	53.26136718
86.64	69.13555668	72.17603701	36.09125594	52.8755496
86.66	67.68654465	72.27536455	35.57445546	52.5224057
86.68	66.28372232	72.70569522	35.6093427	52.43799272
86.7	64.73159167	73.40110223	36.09038123	52.6454505
86.72	63.3180271	74.1409546	36.75834867	53.098018
86.74	62.04028618	74.59754778	37.61394378	53.48090201
86.76	60.94895439	75.62912832	39.0037567	54.37201537
86.78	60.0626393	77.18302558	40.66727374	55.4505228
86.8	59.78128931	79.69157953	42.40898776	56.62872383
86.82	59.56330873	81.92051168	44.2205319	58.04572656

86.84	59.63749823	84.65064213	46.01216807	59.76622105
86.86	60.0793154	87.37830215	47.65300334	61.31123066
86.88	61.33428759	89.8853241	48.79684195	62.82713014
86.9	63.1190717	92.02930023	49.81329558	64.02730812
86.92	65.00881181	94.2202973	50.7820993	65.17977753
86.94	66.7457751	96.0154141	51.53894934	65.88420669
86.96	68.48717969	97.52527859	51.90792901	66.57442512
86.98	70.13771261	98.86141066	52.02794823	67.20619274
87	71.91430984	99.85565376	52.13007888	68.11138234
87.02	73.52930226	100.9389675	52.29820407	68.47015269
87.04	74.8404055	101.7945192	52.31850743	68.47000708
87.06	76.03392153	102.7093447	52.3679371	67.89721408
87.08	77.16493983	102.7580767	52.17396299	66.79839721
87.1	77.84976236	102.7386045	52.04934372	65.25986348
87.12	77.65259986	102.1470867	51.71510466	63.65440894
87.14	77.29171706	101.5067631	51.54318738	61.76609465
87.16	76.45948225	100.3547568	51.32376883	59.77834766
87.18	75.78671049	98.73593083	51.11598139	57.99725351
87.2	74.5780544	96.65228739	51.29903024	56.01656891
87.22	73.25190919	94.65517444	51.82429366	54.37658307
87.24	71.89056325	92.30620993	52.52422186	53.00229042
87.26	70.69063909	90.0645495	53.3384417	51.5958469
87.28	69.10940843	87.44725958	54.3239013	50.21857013
87.3	67.56595308	84.59043584	55.41125796	49.02475882
87.32	66.05821013	81.69244817	56.58769643	47.95841642
87.34	64.64644757	79.00735969	57.61198605	46.87496612
87.36	63.45403782	76.4298645	58.60974719	46.42428557
87.38	62.45509961	73.96757205	59.39873799	45.94694105
87.4	62.01860451	72.11943473	59.95545657	45.56049954
87.42	61.50021236	69.98357974	60.39804733	45.41070381
87.44	61.57941147	68.66820305	60.6604682	45.58965012
87.46	62.13213065	67.501712	60.68703509	45.79478613
87.48	63.18751744	66.53976438	60.4580362	46.04991
87.5	64.40376479	65.55397007	60.2207655	46.37616746
87.52	65.68750329	65.1551441	59.88482556	46.81474163
87.54	67.17356254	64.72346951	59.41837395	47.04459804
87.56	68.67514208	64.56687734	58.91008191	47.47791688
87.58	70.21819699	64.86027606	58.52476085	48.20502376
87.6	70.92778845	65.79378602	58.1643786	48.88237436
87.62	71.61531904	67.01691779	57.9784599	49.35511781
87.64	72.64706543	68.83622206	57.52253615	49.97342704
87.66	73.57090909	70.76360097	56.89916169	50.62998685
87.68	74.52768025	72.40083831	56.1949186	51.03616139
87.7	75.12879968	74.1691445	55.58535443	51.10775913
87.72	75.53767924	75.77310648	54.96392962	51.33638689
87.74	76.41297401	77.4789817	54.40806452	51.28343109
87.76	77.40601881	78.80870664	53.51206897	51.27664678

87.78	78.10594398	80.04043483	52.53324906	51.45258166
87.8	78.5686844	80.75971079	51.801622	51.47103549
87.82	79.40974315	81.46790171	51.22768632	51.56911417
87.84	80.51836485	81.48965618	50.62573061	51.78101224
87.86	81.55201436	81.21604207	49.84869451	52.17059157
87.88	81.84133684	80.927568	48.79670644	52.45066235
87.9	82.2501355	80.49389625	47.6734321	52.74512792
87.92	82.48490848	79.43459399	46.52470523	53.19715947
87.94	82.74762564	78.20107898	45.15357266	53.40228132
87.96	82.90800283	76.58151077	43.74022753	53.58250885
87.98	82.79589847	75.01252199	42.30943068	53.64393771
88	82.32611386	73.55267873	40.84828395	53.94928203
88.02	81.78956113	71.81404085	39.37435636	54.51378805
88.04	81.57333704	70.56583881	37.92358985	55.36844474
88.06	81.52218627	69.11891394	36.57430782	55.70392052
88.08	81.50337951	67.62668217	35.32505916	56.30919405
88.1	81.36712509	65.74735565	34.46556174	56.94695015
88.12	81.36658813	64.14514713	34.10400445	57.75360299
88.14	81.09053494	62.47449793	34.15116493	58.86310446
88.16	80.95526342	61.25669026	34.28424917	60.01812216
88.18	80.58880069	60.9470179	34.73984731	61.30121853
88.2	80.34154111	60.53760036	35.42564466	62.41896956
88.22	80.68929315	59.87748913	36.49612499	63.77297907
88.24	80.72984731	59.55002326	37.66754272	65.29976641
88.26	81.12565982	59.25083729	39.25234604	66.94084639
88.28	81.39313176	59.3571261	40.96597027	68.5366033
88.3	81.91925068	59.50904237	42.80226919	70.17775812
88.32	82.47870867	60.12629285	44.72883001	71.90999798
88.34	83.1839549	60.84505612	46.66651633	73.29483062
88.36	84.20799676	61.87410759	48.66727879	74.59886035
88.38	84.93487815	62.88188492	50.78460714	76.13580847
88.4	85.82780767	63.87312974	53.03221155	77.31885125
88.42	87.2947386	64.71730913	55.2135049	78.2151259
88.44	88.40407422	65.42673577	57.21287491	79.26572758
88.46	88.8639913	66.00333805	59.2507746	80.25009506
88.48	89.25305289	66.90780059	61.40760947	80.87335625
88.5	90.20523713	67.77814845	63.36963191	81.26668622
88.52	90.76603094	68.76700475	65.11601881	81.50659521
88.54	90.69295379	69.93236121	66.45862676	81.24614218
88.56	90.23337446	71.09562342	67.60070078	80.85445748
88.58	89.63212964	72.4171079	68.80343614	80.33897462
88.6	88.91368288	74.07070583	69.75929315	79.82883911
88.62	88.22776115	75.86737688	70.33400445	78.72862878
88.64	87.4367388	78.03421074	70.65757104	77.32482253
88.66	86.83135201	79.88634038	70.56247649	75.56862777
88.68	86.19865912	81.9336394	70.01991506	74.12239155
88.7	86.15574578	84.0060451	69.44870867	72.27085347

88.72	86.70006067	86.38777733	68.41019213	70.21772778
88.74	87.71788654	88.665766	66.8928921	67.85128122
88.76	88.9431985	91.28883507	65.16403681	65.57996562
88.78	90.56304783	93.59072404	63.35336637	63.02604712
88.8	92.6827293	95.05570634	61.36016887	60.60761553
88.82	94.96326524	96.56782789	59.03440489	58.46348468
88.84	97.38794216	98.20269896	56.51036606	56.08988371
88.86	100.2658894	99.63621802	54.07801598	53.69477905
88.88	103.0430185	100.5759217	51.58638487	51.17105875
88.9	105.6014683	101.1781515	49.14196582	48.94048134
88.92	107.638016	101.8348306	46.86126302	46.7843786
88.94	109.8945353	102.2192527	44.53634847	44.70059258
88.96	111.6233249	102.4128173	41.9383335	43.07380423
88.98	112.6190009	101.4932713	39.45615836	41.27637476
89	113.7608504	100.0474133	37.34138538	39.3169997
89.02	114.841804	97.75014764	35.23675296	37.55935181
89.04	114.8737607	95.28311558	33.33364546	36.23273132
89.06	114.1183659	92.13401254	31.91876024	35.18113662
89.08	113.1016665	88.99963293	30.89594903	34.29529679
89.1	111.4188745	85.69737082	30.17667712	33.78816968
89.12	108.1907695	82.51952675	29.89698857	33.59472545
89.14	104.0540944	79.55578117	29.9522429	33.31190818
89.16	99.63294671	76.90520781	30.49947821	33.04142684
89.18	94.81529983	74.30411872	31.38264132	32.95918799
89.2	89.43968854	72.30397917	32.26416726	33.13075437
89.22	83.76004348	70.7897654	33.26586915	33.56899889
89.24	77.70608656	69.80810294	34.07923754	34.68301143
89.26	72.02052584	69.27181919	34.73764587	36.0261169
89.28	66.21345535	68.99175751	35.27812418	37.51059359
89.3	60.68262211	68.82646274	35.78557994	39.03590151
89.32	55.53272727	68.61968349	35.89169481	40.71651229
89.34	51.22420669	68.4763424	35.9928466	42.61786025
89.36	47.04176054	68.93453939	36.18450197	44.91066943
89.38	43.98725958	69.3455587	36.36464253	46.88431591
89.4	41.60507837	70.18777429	36.30537971	49.25653049
89.42	40.11167863	71.47620386	36.30785924	51.67069572
89.44	39.46988674	72.76028112	36.41180504	53.92660633
89.46	39.80678936	73.99267873	36.41131864	56.06170189
89.48	41.03513601	75.21833654	36.22858732	58.29630094
89.5	42.77823946	77.07232986	35.82999697	60.66705633
89.52	45.39658509	78.97138234	35.43723936	62.55150672
89.54	48.96247042	80.88342805	34.76892102	64.17204065
89.56	52.84151886	82.49285873	33.90227222	65.63327839
89.58	57.38835979	83.54293558	33.2238467	66.6342977
89.6	62.54126302	84.58989686	32.6586581	67.36298311
89.62	67.79489837	85.22723228	31.88268076	67.78507534
89.64	72.79697846	85.36446557	31.36725453	68.00482152

89.66	77.78288603	84.79373546	31.31741127	67.68945697
89.68	83.09852058	84.4474861	31.67420669	67.22993933
89.7	87.33248155	84.22428658	32.19074426	66.61728486
89.72	89.09435375	83.46376122	33.05079141	66.41522606
89.74	90.46536553	82.51313677	34.10657802	66.0621061
89.76	91.44551689	81.37241321	35.35810408	65.55792499
89.78	92.03480782	80.04159056	36.8053696	64.90268273
89.8	92.23323832	78.5206688	38.44837458	64.09637931
89.82	92.0408084	76.80964794	40.28711902	63.13901474
89.84	91.45751805	74.90852799	42.32160292	62.03058901
89.86	90.48336728	72.81730893	44.55182627	60.77110213
89.88	89.11835608	70.53599077	46.97778908	59.3605541
89.9	87.36248445	68.06457352	49.59949135	57.79894491
89.92	85.2157524	65.40305716	52.41693308	56.08627457
89.94	82.67815993	62.5514417	55.43011427	54.22254308
89.96	79.74970702	59.50972715	58.63903491	52.20775043
89.98	76.4303937	56.27791349	62.04369501	50.04189663
90	72.72021994	52.85600073	65.64409457	47.72498167

Table 3: Alpha-Beta crystalline phases intensity ratio (Figure 6b) data.

Description: Table 3 contains the sum of the Alpha-Beta crystalline phases intensity ratio data of the PVDF nanofiber samples with different CNDs concentrations.

Sample Name	Alpha Intensity (a.u.)	Beta Intensity (a.u.)	Alpha-Beta Ratio
PVDF	514.65	686.88	0.749257512
PVDF/1.25% CNDs	892.29	530.36	1.68242326
PVDF/2.5% CNDs	1106.41	496.04	2.230485445
PVDF/5% CNDs	1039.39	579.69	1.793010057

Table 4: Thermo-analytical curves (Figure 7a) data of the PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations)

Description: Table 4 contains the thermo-analytical curves data of the PVDF and PVDF/CNDs nanofiber samples within the heating range (100-300°C), with temperatures in degree Celsius (°C) and heating rate in milli-Watt per milligram (mW/mg).

Temperature	Heat	Temperature	Heat flow	Temperature	Heat flow	Temperature	Heat flow
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(degree) for PVDF	flow (mW per mg) for PVDF	(degree) for PVDF/1.25% CNDs	(mW per mg) for PVDF/1.25% CNDs	(degree) for PVDF/2.5% CNDs	(mW/mg) for PVDF/2.5% CNDs	(degree) for PVDF/5% CNDs	(mW per mg) for PVDF/5% CNDs
102.89	0.00434	101.84	0.00164	101.45	4.82E-04	91.01	0.011612
112.58	0.0029	111.49	-0.00151	111.15	0.002352	100.65	0.012172
122.27	0.004589	121.2	0.005417	120.71	0.002981	110.33	0.005716
131.95	0.006722	130.92	0.015704	130.55	0.008229	119.96	0.006315
141.65	-0.01385	140.7	-0.02971	140.23	-0.00368	129.69	0.013415
151.36	-0.1143	150.29	-0.14183	149.83	-0.10971	139.53	0.001417
160.95	-0.15474	159.97	-0.24061	159.49	-0.1823	149.16	-0.08485
170.7	-0.10229	169.56	-0.1783	169.19	-0.1381	158.82	-0.14368
180.43	-0.01032	179.31	-0.05732	178.85	-0.02748	168.4	-0.10711
190.06	0.007155	189.02	0.019477	188.57	0.010363	178.1	-0.01508
199.84	0.013441	198.73	0.010062	198.37	0.007282	187.79	0.015995
209.42	0.010272	208.46	0.005947	207.96	0.008456	197.54	0.008846
219.23	0.008226	218.17	9.32E-04	217.59	0.003562	207.26	0.003376
228.87	0.019425	227.91	7.64E-04	227.32	0.004701	216.92	2.60E-04
238.65	0.035978	237.59	2.86E-04	237.14	-0.00134	226.71	0.001298
248.35	0.040922	247.43	-0.00315	246.85	-0.00272	236.47	0.004414
258.15	0.042453	257.21	-0.00264	256.65	-0.00359	246.13	0.007149
267.91	0.048179	266.88	3.28E-04	266.33	-2.36E-05	255.95	0.011977
277.69	0.059709	276.63	-0.00299	276.14	0.007236	265.6	0.007621
287.41	0.078123	286.31	-0.00456	285.95	-0.01026	275.42	0.002836
297.13	0.056986	296.13	-0.00322	295.65	-0.01142	285.13	4.71E-04
299.45	0.008838	299.65	7.87E-04	299.61	-0.00781	294.93	-5.76E-04

Table 5: Raman spectra (Figure 7b) data of the PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations).

Description: Table 5 contains the Raman Spectroscopy data of the individual nanofiber samples with Raman shift per centimeter unit (cm^{-1}) and intensity in arbitrary unit (a.u).

Raman shift (/cm)	PVDF	PVDF/1.25% CNDs	PVDF/2.5% CNDs	PVDF/5% CNDs
99.8928	56.74858415	40.93899061	40.85609635	-99.87444161
100.857	56.79406253	40.72764303	40.63939985	-99.23066208
101.821	56.8395409	40.51629545	40.42270336	-98.58688255
102.785	56.88501927	40.30494786	40.20600686	-97.94310302
103.75	56.93049764	40.09360028	39.98931036	-97.29932349
104.714	56.97597602	39.8822527	39.77261387	-96.65554396
105.678	57.02145439	39.67090512	39.55591737	-96.01176442
106.642	57.06693276	39.45955754	39.33922088	-95.36798489
107.607	57.11241113	39.24820996	39.12252438	-94.72420536
108.571	57.15788951	39.03686238	38.90582789	-94.08042583
109.535	57.20336788	38.8255148	38.68913139	-93.4366463
110.499	57.24884625	38.61416722	38.47243489	-92.79286677
111.464	57.29432462	38.40281964	38.2557384	-92.14908723
112.428	57.33980299	38.19147206	38.0390419	-91.5053077
113.392	57.38528137	37.98012448	37.82234541	-90.86152817
114.356	57.43075974	37.7687769	37.60564891	-90.21774864
115.32	57.47623811	37.55742932	37.38895241	-89.57396911
116.285	57.52171648	37.34608174	37.17225592	-88.93018958
117.249	57.56719486	37.13473416	36.95555942	-88.28641005
118.213	57.61267323	36.92338658	36.73886293	-87.64263051
119.177	57.6581516	36.712039	36.52216643	-86.99885098
120.142	57.70362997	36.50069142	36.30546994	-86.35507145
121.106	57.74910835	36.28934384	36.08877344	-85.71129192
122.07	57.79458672	36.07799626	35.87207694	-85.06751239
123.034	57.84006509	35.86664868	35.65538045	-84.42373286
123.999	57.88554346	35.6553011	35.43868395	-83.77995332
124.963	57.93102184	35.44395352	35.22198746	-83.13617379
125.927	57.97650021	35.23260594	35.00529096	-82.49239426
126.891	58.02197858	35.02125836	34.78859447	-81.84861473
127.856	58.06745695	34.80991078	34.57189797	-81.2048352
128.82	58.11293533	34.5985632	34.35520147	-80.56105567
129.784	58.1584137	34.38721562	34.13850498	-79.91727613
130.748	58.20389207	34.17586804	33.92180848	-79.2734966
131.713	58.24937044	33.96452046	33.70511199	-78.62971707
132.677	58.29484881	33.75317288	33.48841549	-77.98593754
133.641	58.34032719	33.5418253	33.27171899	-77.34215801
134.605	58.38580556	33.33047772	33.0550225	-76.69837848
135.569	58.43128393	33.11913014	32.838326	-76.05459895
136.534	58.4767623	32.90778256	32.62162951	-75.41081941
137.498	58.52224068	32.69643498	32.40493301	-74.76703988
138.462	58.56771905	32.4850874	32.18823652	-74.12326035
139.426	58.61319742	32.27373982	31.97154002	-73.47948082
140.391	58.65867579	32.06239224	31.75484352	-72.83570129
141.355	58.70415417	31.85104466	31.53814703	-72.19192176
142.319	58.74963254	31.63969708	31.32145053	-71.54814222

143.283	58.79511091	31.4283495	31.10475404	-70.90436269
144.248	58.84058928	31.21700192	30.88805754	-70.26058316
145.212	58.88606766	31.00565434	30.67136104	-69.61680363
146.176	58.93154603	30.79430676	30.45466455	-68.9730241
147.14	58.9770244	30.58295918	30.23796805	-68.32924457
148.105	59.02250277	30.3716116	30.02127156	-67.68546504
149.069	59.06798115	30.16026402	29.80457506	-67.0416855
150.033	59.11345952	29.94891644	29.58787857	-66.39790597
150.997	59.15893789	29.73756886	29.37118207	-65.75412644
151.961	59.20441626	29.52622128	29.15448557	-65.11034691
152.926	59.24989464	29.3148737	28.93778908	-64.46656738
153.89	59.29537301	29.10352612	28.72109258	-63.82278785
154.854	59.34085138	28.89217853	28.50439609	-63.17900831
155.818	59.38632975	28.68083095	28.28769959	-62.53522878
156.783	59.43180812	28.46948337	28.07100309	-61.89144925
157.747	59.4772865	28.25813579	27.8543066	-61.24766972
158.711	59.52276487	28.04678821	27.6376101	-60.60389019
159.675	59.56824324	27.83544063	27.42091361	-59.96011066
160.639	59.61372161	27.62409305	27.20421711	-59.31633113
161.604	59.65919999	27.41274547	26.98752062	-58.67255159
162.568	59.70467836	27.20139789	26.77082412	-58.02877206
163.532	59.75015673	26.99005031	26.55412762	-57.38499253
164.496	59.7956351	26.77870273	26.33743113	-56.741213
165.461	59.84111348	26.56735515	26.12073463	-56.09743347
166.425	59.88659185	26.35600757	25.90403814	-55.45365394
167.389	59.93207022	26.14465999	25.68734164	-54.8098744
168.353	59.97754859	25.93331241	25.47064514	-54.16609487
169.318	60.02302697	25.72196483	25.25394865	-53.52231534
170.282	60.06850534	25.51061725	25.03725215	-52.87853581
171.246	60.11398371	25.29926967	24.82055566	-52.23475628
172.21	60.15946208	25.08792209	24.60385916	-51.59097675
173.174	60.20494046	24.87657451	24.38716267	-50.94719721
174.139	60.25041883	24.66522693	24.17046617	-50.30341768
175.103	60.2958972	24.45387935	23.95376967	-49.65963815
176.067	60.34137557	24.24253177	23.73707318	-49.01585862
177.031	60.38685395	24.03118419	23.52037668	-48.37207909
177.996	60.43233232	23.81983661	23.30368019	-47.72829956
178.96	60.47781069	23.60848903	23.08698369	-47.08452003
179.924	60.52328906	23.39714145	22.8702872	-46.44074049
180.888	60.56876743	23.18579387	22.6535907	-45.79696096
181.853	60.61424581	22.97444629	22.4368942	-45.15318143
182.817	60.65972418	22.76309871	22.22019771	-44.5094019
183.781	60.70520255	22.55175113	22.00350121	-43.86562237
184.745	60.75068092	22.34040355	21.78680472	-43.22184284
185.71	60.7961593	22.12905597	21.57010822	-42.5780633
186.674	60.84163767	21.91770839	21.35341172	-41.93428377
187.638	60.88711604	21.70636081	21.13671523	-41.29050424

188.602	60.93259441	21.49501323	20.92001873	-40.64672471
189.566	60.97807279	21.28366565	20.70332224	-40.00294518
190.531	61.02355116	21.07231807	20.48662574	-39.35916565
191.495	61.06902953	20.86097049	20.26992925	-38.71538612
192.459	61.1145079	20.64962291	20.05323275	-38.07160658
193.423	61.15998628	20.43827533	19.83653625	-37.42782705
194.388	61.20546465	20.22692775	19.61983976	-36.78404752
195.352	61.25094302	20.01558017	19.40314326	-36.14026799
196.316	61.29642139	19.80423259	19.18644677	-35.49648846
197.28	61.48854478	19.59256443	18.99029378	-34.79435164
198.245	61.67498259	19.38330129	18.79211095	-34.09271383
199.209	61.85428955	19.1764302	18.59298642	-33.39353473
200.173	62.02268756	18.96869239	18.3947603	-32.7041397
201.137	62.18652836	18.760161	18.20082811	-32.0226392
202.101	62.3569602	18.551149	18.01085985	-31.35001682
203.066	62.53221443	18.34006522	17.82024502	-30.68668498
204.03	62.6996204	18.12756493	17.62844677	-30.03229741
204.994	62.86465821	17.91584458	17.43563692	-29.38685313
205.958	63.0251204	17.70539085	17.24326209	-28.75005711
206.923	63.18366318	17.49748493	17.05246095	-28.12162229
207.887	63.34337214	17.29069697	16.86284801	-27.50170687
208.851	63.50440647	17.08543269	16.67614065	-26.89019343
209.815	63.66479353	16.88173363	16.49269	-26.28761831
210.78	63.82584726	16.68014453	16.3119407	-25.69358647
211.744	63.98618856	16.4811698	16.13450746	-25.10746607
212.708	64.14283731	16.28532791	15.96102393	-24.5292203
213.672	64.29437264	16.09255368	15.79106756	-23.95888
214.637	64.44160647	15.90232388	15.62260284	-23.39609095
215.601	64.58551642	15.7153297	15.45468453	-22.84035164
216.565	64.72635025	15.5325792	15.28727891	-22.29122876
217.529	64.86510149	15.35447871	15.12062	-21.748281
218.494	65.00301294	15.18009657	14.95490318	-21.21110537
219.458	65.14031542	15.00883144	14.79071438	-20.67936955
220.422	65.27565174	14.84112383	14.62714249	-20.15293025
221.386	65.40982935	14.67745453	14.46324423	-19.63172627
222.35	65.54337463	14.51737438	14.29873567	-19.11577552
223.315	65.67546965	14.36023502	14.13361348	-18.60519592
224.279	65.80326766	14.20588796	13.9679303	-18.10007552
225.243	65.92526766	14.05481567	13.80147249	-17.60047453
226.207	66.04070348	13.90781388	13.63518423	-17.10650886
227.172	66.14925373	13.7655408	13.47017771	-16.61831184
228.136	66.24966766	13.62703557	13.30566149	-16.13595363
229.1	66.34064975	13.49057746	13.14014473	-15.65943174
230.064	66.42132239	13.35539433	12.97405637	-15.18880189
231.029	66.49279154	13.22174313	12.81083567	-14.72402478
231.993	66.55759453	13.08968532	12.65279582	-14.26492279
232.957	66.6170209	12.95898692	12.50065572	-13.81125114

233.921	66.67170498	12.82969254	12.3539998	-13.36276557
234.886	66.72121194	12.70162383	12.21240617	-12.91910239
235.85	66.76587811	12.57480438	12.07434697	-12.47974318
236.814	66.80742537	12.44955537	11.93817184	-12.04400985
237.778	66.84862935	12.3267698	11.80324791	-11.61111284
238.742	66.89341642	12.20731323	11.67021995	-11.18022876
239.707	66.94596318	12.09143119	11.5400808	-10.75052627
240.671	67.00997264	11.97881169	11.41303542	-10.32137701
241.635	67.08414975	11.86908448	11.28870891	-9.892494925
242.599	67.16948458	11.76194522	11.1667493	-9.463844677
243.564	67.26836418	11.65702522	11.04666542	-9.035443682
244.528	67.38155025	11.55356587	10.92826776	-8.607396418
245.492	67.5060398	11.45064741	10.81108284	-8.179924776
246.456	67.6396607	11.34787358	10.69499408	-7.753323781
247.421	67.7824995	11.24546478	10.58029701	-7.327930746
248.385	67.93373532	11.14352522	10.46744731	-6.904252139
249.349	68.09030697	11.04169721	10.35721866	-6.482779005
250.313	68.24696119	10.9391894	10.24903796	-6.06387602
251.277	68.40234129	10.8357495	10.14192279	-5.647979502
252.242	68.55515473	10.73152279	10.03671801	-5.235749652
253.206	68.7030806	10.62697995	9.936221244	-4.827985473
254.17	68.84284478	10.52276184	9.84285806	-4.425138706
255.134	68.97019154	10.41890726	9.755077662	-4.02738398
256.099	69.08019005	10.31501318	9.669942537	-3.634760597
257.063	69.1721408	10.21027358	9.586168557	-3.247324279
258.027	69.24676517	10.10402085	9.5031499	-2.864988955
258.991	69.30538408	9.995873383	9.420558856	-2.487450647
259.955	69.34856816	9.886271791	9.338459851	-2.114282985
260.92	69.37862935	9.775953184	9.256611095	-1.745040199
261.884	69.39813831	9.66549995	9.174056368	-1.379296915
262.848	69.40782786	9.555583383	9.090760348	-1.016664577
263.812	69.40681741	9.446976965	9.007188706	-0.656878507
264.777	69.39394478	9.340326667	8.924364279	-0.29977204
265.741	69.37517313	9.235701244	8.842686766	0.054773731
266.705	69.35551542	9.133187612	8.761795622	0.406830448
267.669	69.3362791	9.032559353	8.681472338	0.756392637
268.634	69.31650896	8.933667114	8.602937463	1.103471244
269.598	69.29682736	8.836769652	8.527210299	1.448103582
270.562	69.27785721	8.742644726	8.453600796	1.790213035
271.526	69.25564179	8.651195871	8.381869502	2.129595622
272.49	69.22705821	8.562266617	8.312649602	2.466143383
273.455	69.1929209	8.476298507	8.246803333	2.799723483
274.419	69.15850896	8.39506602	8.186026716	3.129944876
275.383	69.12381244	8.319269502	8.132153085	3.456322985
276.348	69.08636368	8.248612637	8.086076468	3.778474229
277.312	69.044101	8.182069204	8.044634677	4.09622796
278.276	68.99837512	8.11885592	8.004346119	4.409372239

279.24	68.9528204	8.058427711	7.963796866	4.7175399
280.204	68.91227214	7.999718955	7.923388905	5.020202587
281.169	68.87792935	7.941977562	7.88256403	5.317015522
282.133	68.84750299	7.884951542	7.840501343	5.607780697
283.097	68.81683184	7.828799602	7.795357413	5.892203582
284.061	68.78496816	7.773367015	7.744848706	6.169890647
285.026	68.75322985	7.718422985	7.687838905	6.440401095
285.99	68.72374279	7.664196716	7.625186667	6.703262289
286.954	68.69850249	7.611118905	7.557782637	6.958029453
287.918	68.67915771	7.559465622	7.486444527	7.204411045
288.882	68.66833831	7.509037662	7.411078507	7.4423001
289.847	68.66394129	7.459221393	7.33288607	7.671773731
290.811	68.66091343	7.409443632	7.254674129	7.893069751
291.775	68.65425473	7.359899453	7.18009204	8.106634925
292.739	68.64203781	7.311293831	7.108650597	8.312979701
293.704	68.6225806	7.263506219	7.037802587	8.51260806
294.668	68.59428806	7.216015274	6.967859154	8.706147363
295.632	68.56041294	7.16938602	6.900515721	8.894479701
296.596	68.52585124	7.124843134	6.837241045	9.078506567
297.561	68.49506667	7.082614378	6.777979055	9.258945871
298.525	68.46851194	7.042164378	6.722983383	9.436410547
299.489	68.44340547	7.003296866	6.671651493	9.611490149
300.453	68.41669801	6.966147065	6.62219005	9.784863284
301.418	68.38783632	6.930884428	6.57490592	9.957221493
302.382	68.35775473	6.896834378	6.530680697	10.1293001
303.346	68.32585622	6.862750498	6.488345025	10.30183045
304.31	68.28941841	6.828264378	6.44631791	10.47551652
305.274	68.2453199	6.794004627	6.403808756	10.65081602
306.239	68.19195274	6.761021393	6.360416318	10.82787224
307.203	68.13054428	6.729226119	6.315545672	11.00664463
308.167	68.06400249	6.698135771	6.268919303	11.18701075
309.131	67.99192289	6.667966468	6.222035323	11.36885572
310.096	67.91190995	6.639177413	6.177178458	11.55215373
311.06	67.82383632	6.611956418	6.13658408	11.73694557
312.024	67.73178955	6.586181642	6.101525025	11.92316498
312.988	67.6370204	6.561293731	6.073027363	12.11057139
313.953	67.53804229	6.536771542	6.050725373	12.29883114
314.917	67.43481343	6.512290299	6.033624876	12.48771149
315.881	67.33099652	6.487734627	6.019767164	12.67695428
316.845	67.22992488	6.462838905	6.008438308	12.86629975
317.81	67.13454129	6.437437711	5.999746269	13.05550607
318.774	67.04750348	6.411646119	5.992955224	13.24430124
319.738	66.9688806	6.385808507	5.988060199	13.43231915
320.702	66.8973209	6.360068905	5.984595025	13.6191995
321.666	66.8326199	6.334935323	5.983395025	13.80473667
322.631	66.7753791	6.310667662	5.984298209	13.98883224
323.595	66.72754975	6.286879851	5.987075473	14.17157502

324.559	66.69185224	6.26300796	5.991480697	14.35314716
325.523	66.670699	6.238928905	5.997291244	14.53376458
326.488	66.66334279	6.215496219	6.003531343	14.71339095
327.452	66.66749453	6.193840199	6.010258905	14.89170587
328.416	66.67974428	6.175141343	6.018067811	15.06819144
329.38	66.69834975	6.159432139	6.026623433	15.24222975
330.344	66.72485174	6.145278557	6.03463801	15.41313771
331.309	66.75955622	6.132230498	6.041575572	15.58017751
332.273	66.79581493	6.121604826	6.047724677	15.74255313
333.237	66.82848159	6.114385473	6.053315323	15.89940587
334.202	66.85516468	6.109815622	6.058524826	16.04985065
335.166	66.87598756	6.107119104	6.06322806	16.19301746
336.13	66.88840249	6.106504328	6.066801443	16.3282897
337.094	66.88960199	6.108409005	6.068551194	16.45547761
338.058	66.87902139	6.112438557	6.068849353	16.57474746
339.023	66.85733881	6.117851443	6.068011493	16.68633423
339.987	66.82309104	6.125224826	6.06529403	16.79059458
340.951	66.77603781	6.135468607	6.059522687	16.88800149
341.915	66.71552438	6.148996517	6.050521592	16.9791896
342.88	66.64115274	6.165762935	6.039225522	17.06504393
343.844	66.55480348	6.185240348	6.025319204	17.14662348
344.808	66.46059403	6.206516716	6.00844607	17.22503931
345.772	66.36258905	6.229573582	5.989686468	17.3013476
346.736	66.26193433	6.254600547	5.970518756	17.37677499
347.701	66.15909602	6.281611741	5.95131393	17.4525405
348.665	66.05440398	6.310412886	5.931265423	17.52968453
349.629	65.94783582	6.341255771	5.90953	17.60893363
350.593	65.83992189	6.3747701	5.886832836	17.69070602
351.558	65.73401542	6.411352189	5.864734527	17.77514269
352.522	65.63452637	6.450362736	5.844214876	17.86203841
353.486	65.54244975	6.490769154	5.825985323	17.95079448
354.45	65.45161194	6.531810597	5.810217065	18.04058806
355.415	65.35520448	6.573523532	5.795930945	18.13057488
356.379	65.25487562	6.615753532	5.78374607	18.2200508
357.343	65.15412388	6.657804527	5.774727512	18.30856303
358.307	65.05691791	6.700097861	5.768931393	18.39589552
359.272	64.9642005	6.743402289	5.765207711	18.48205323
360.236	64.87425174	6.787474129	5.762716716	18.56707856
361.2	64.78393731	6.831313532	5.760587662	18.65086851
362.164	64.69169303	6.874683284	5.758331294	18.73319657
363.128	64.59605373	6.918412736	5.756221294	18.81393512
364.093	64.49720398	6.962198607	5.754991343	18.89304915
365.057	64.39377015	7.004352985	5.754860746	18.97062418
366.021	64.28756119	7.043381194	5.755384129	19.04685323
366.985	64.18112637	7.078429602	5.756134826	19.12198244
367.95	64.07631642	7.109399403	5.757922786	19.19636736
368.914	63.97445373	7.136820746	5.762032985	19.27045711

369.878	63.8736602	7.161361443	5.768228706	19.34478721
370.842	63.7723995	7.182785771	5.774989204	19.41965552
371.807	63.6709005	7.200923383	5.781369055	19.49506632
372.771	63.57005771	7.216365771	5.787916915	19.57069348
373.735	63.47019602	7.2301901	5.796331144	19.64592731
374.699	63.3725398	7.242557612	5.807629801	19.72001527
375.663	63.27776517	7.252478905	5.821734726	19.79209935
376.628	63.1819403	7.258909204	5.837560846	19.86140388
377.592	63.08201692	7.262550348	5.853875025	19.92744493
378.556	62.98153184	7.266155672	5.869965373	19.99001801
379.52	62.88648955	7.271486915	5.885336866	20.04911204
380.485	62.79660348	7.278683234	5.898636418	20.10479413
381.449	62.70730348	7.287867065	5.909101493	20.15706144
382.413	62.6144592	7.299504677	5.917093731	20.20576318
383.377	62.51534378	7.31366209	5.923132189	20.25060279
384.342	62.41097811	7.329748507	5.926740299	20.29126488
385.306	62.30170647	7.347845522	5.92851408	20.32760284
386.27	62.18459751	7.367825771	5.929827811	20.35972672
387.234	62.0565403	7.388911095	5.932257413	20.38797119
388.199	61.92026766	7.410813035	5.936017861	20.41262189
389.163	61.78069453	7.433537363	5.940118557	20.4338
390.127	61.63767164	7.457371692	5.943299154	20.45158159
391.091	61.48913632	7.482443582	5.945522289	20.46613582
392.055	61.33160697	7.508824229	5.946888955	20.47761891
393.02	61.16010746	7.536526318	5.947597313	20.48601692
393.984	60.97639353	7.565224478	5.946439751	20.49112637
394.948	60.78421791	7.595265323	5.942688955	20.492799
395.912	60.5828801	7.627214726	5.936530299	20.49103483
396.877	60.36872189	7.661283035	5.928791493	20.48607512
397.841	60.13996119	7.696744726	5.919836169	20.47830995
398.805	59.89651891	7.732230348	5.908513532	20.46812338
399.769	59.6393806	7.767978955	5.895146567	20.45601542
400.734	59.37527711	7.805582239	5.881182388	20.442599
401.698	59.11101095	7.846355771	5.867127761	20.4285209
402.662	58.8474791	7.890327015	5.851830647	20.41435721
403.626	58.58232338	7.936991244	5.835087313	20.40055174
404.591	58.31659104	7.984751493	5.8188901	20.38740597
405.555	58.0549005	8.032989403	5.803926517	20.37514328
406.519	57.80192488	8.081526816	5.789334428	20.36400299
407.483	57.55959552	8.130253781	5.775192388	20.35429104
408.447	57.32403532	8.178867662	5.764117114	20.34634279
409.412	57.09194925	8.226421045	5.758219453	20.34045174
410.376	56.86794726	8.271973532	5.757248159	20.33671144
411.34	56.65968756	8.315947662	5.759594826	20.3347398
412.304	56.47004577	8.358822338	5.763493134	20.33408358
413.269	56.29852935	8.401012836	5.767721144	20.3345796
414.233	56.1443408	8.442288109	5.773512239	20.33624478

415.197	56.00442786	8.482720597	5.782401741	20.3389796
416.161	55.87418557	8.523073881	5.794286617	20.34266617
417.125	55.75335522	8.564021692	5.807648607	20.34738706
418.09	55.63987711	8.605313035	5.821576766	20.35340398
419.054	55.53094975	8.645941542	5.835811393	20.36098557
420.018	55.424799	8.684788607	5.849405423	20.37029552
420.983	55.32116766	8.720964179	5.861580796	20.38124478
421.947	55.22192289	8.754891791	5.872889602	20.39351493
422.911	55.13019851	8.788174776	5.886171294	20.40685473
423.875	55.04674776	8.821682786	5.902151692	20.42107562
424.839	54.96814328	8.855090697	5.918205373	20.43597363
425.804	54.88956766	8.887870398	5.933176667	20.45125075
426.768	54.80876816	8.919455871	5.948552488	20.46659751
427.732	54.72588955	8.949068159	5.96553	20.4817408
428.696	54.64068458	8.977374677	5.983262587	20.49648806
429.661	54.55356617	9.004387662	6.001553383	20.5106995
430.625	54.46452836	9.029261542	6.022108209	20.52418607
431.589	54.37212438	9.050792388	6.04654408	20.53665622
432.553	54.27472637	9.068722587	6.075220796	20.54780348
433.517	54.17458109	9.082897662	6.10665398	20.5572995
434.482	54.0703801	9.093741891	6.139999851	20.56487861
435.446	53.95961393	9.101887264	6.174722886	20.57054726
436.41	53.84061194	9.108350398	6.210800896	20.57442985
437.374	53.71148358	9.113765323	6.248616119	20.57644776
438.339	53.56995124	9.118386468	6.287972488	20.57637811
439.303	53.41383184	9.122136866	6.328157413	20.57424925
440.267	53.24410796	9.12479806	6.367829751	20.57020647
441.231	53.06387562	9.12618602	6.405451194	20.56429552
442.196	52.87636269	9.125964975	6.440301393	20.5563199
443.16	52.68295473	9.124021791	6.472079801	20.54574129
444.124	52.4845806	9.121032338	6.500847065	20.53187114
445.088	52.28432935	9.11788005	6.527090597	20.51417015
446.053	52.08747562	9.114923682	6.550475473	20.49234279
447.017	51.90089353	9.112082637	6.569633433	20.4661607
447.981	51.72956517	9.109404428	6.583749453	20.43540647
448.945	51.57516219	9.107718507	6.595170149	20.3998806
449.909	51.43770199	9.107804677	6.605806269	20.35937562
450.874	51.3155592	9.110089204	6.614506119	20.31372139
451.838	51.20671294	9.114582736	6.620088458	20.26283682
452.802	51.10874179	9.121058657	6.622292935	20.20667811
453.766	51.0206408	9.129793632	6.622012637	20.14522736
454.731	50.94391493	9.141791045	6.621199204	20.07860199
455.695	50.87601791	9.157599602	6.621707164	20.00707264
456.659	50.81565522	9.176645274	6.623107164	19.93093682
457.623	50.7614607	9.198443781	6.624893731	19.85057015
458.588	50.71416468	9.222994975	6.627071393	19.76649502
459.552	50.67313881	9.250574627	6.629354378	19.67934627

460.516	50.63545821	9.280859403	6.630628109	19.58975274
461.48	50.59970746	9.313487164	6.631086468	19.49843333
462.445	50.56463632	9.347966965	6.631271493	19.4062398
463.409	50.52954229	9.383988806	6.630855025	19.31392886
464.373	50.49530746	9.421014229	6.629459801	19.22219502
465.337	50.46687413	9.458686468	6.626826269	19.13156915
466.301	50.4484	9.496609751	6.622677164	19.04245025
467.266	50.44031393	9.534612189	6.617060995	18.95556617
468.23	50.44220299	9.572190945	6.610136716	18.87195423
469.194	50.45408458	9.608994925	6.601124577	18.7926
470.158	50.4738194	9.644362239	6.589465124	18.71825075
471.123	50.4966607	9.677694726	6.577580746	18.64942139
472.087	50.51748955	9.708580647	6.567278607	18.58633234
473.051	50.5324796	9.737265075	6.558509453	18.52891443
474.015	50.53983284	9.764712139	6.550312687	18.47704925
474.979	50.54135025	9.791662985	6.543140547	18.43061741
475.944	50.53963731	9.81820194	6.537776169	18.38946318
476.908	50.53666119	9.844483731	6.536449055	18.35343035
477.872	50.53428955	9.871196915	6.541857711	18.3223602
478.837	50.52830896	9.897871294	6.554707313	18.29600199
479.801	50.51624627	9.923430398	6.574264975	18.27402587
480.765	50.49815224	9.946823134	6.600096269	18.25612338
481.729	50.47588657	9.967639602	6.63073801	18.24199055
482.693	50.45012985	9.985994428	6.663051741	18.23123881
483.658	50.42310746	10.00300323	6.695333184	18.22329104
484.622	50.39819751	10.01985313	6.727926517	18.21760199
485.586	50.37640398	10.03646846	6.760046219	18.21368109
486.55	50.35881692	10.05252582	6.790435721	18.21114726
487.515	50.348699	10.06882388	6.819209502	18.20979055
488.479	50.34993383	10.08644269	6.847588657	18.20940547
489.443	50.36099055	10.10500279	6.875361493	18.20982687
490.407	50.37709652	10.12362478	6.901115124	18.21119104
491.372	50.39403731	10.14226896	6.923557164	18.21370846
492.336	50.40940249	10.16069607	6.943115821	18.21742438
493.3	50.42498905	10.17825164	6.962046269	18.22217264
494.264	50.44678308	10.19460741	6.982543035	18.22755871
495.228	50.47900249	10.20999891	7.003592836	18.23295373
496.193	50.52310846	10.22533254	7.023167313	18.237599
497.157	50.58159055	10.24143234	7.041474129	18.24083433
498.121	50.65617363	10.25833985	7.060668905	18.24214279
499.085	50.74486219	10.27508368	7.082477065	18.24117065
500.05	50.84384279	10.29064602	7.106219254	18.23779204
501.014	50.95028458	10.30452189	7.13145806	18.23200299
501.978	51.05820647	10.31567692	7.158993881	18.22373731
502.942	51.16532289	10.32306114	7.18933209	18.21283134
503.906	51.27443532	10.32690114	7.221856119	18.19916716
504.871	51.38886119	10.32879716	7.254711692	18.18283881

505.835	51.50890348	10.3303993	7.28463791	18.16419204
506.799	51.63345323	10.33329398	7.310569403	18.14369801
507.763	51.76169453	10.33785423	7.333072388	18.12190896
508.728	51.8928801	10.34359716	7.352785821	18.0992592
509.692	52.02756368	10.35010264	7.370541542	18.07618209
510.656	52.16674577	10.35729632	7.387321144	18.0531597
511.62	52.30815224	10.36475642	7.403547015	18.03079403
512.585	52.44848607	10.37183697	7.418511692	18.00987065
513.549	52.58813682	10.37882841	7.431549502	17.99117015
514.513	52.72837264	10.3866891	7.443571393	17.9751398
515.477	52.869301	10.39491244	7.455647512	17.96179851
516.442	53.00826119	10.4018109	7.46794204	17.95093035
517.406	53.14666667	10.40686542	7.479009502	17.94201642
518.37	53.28409254	10.4102509	7.487798259	17.93427711
519.334	53.41771443	10.41233791	7.495027711	17.92685373
520.298	53.54502139	10.4131207	7.503303433	17.91915821
521.263	53.6632403	10.41212761	7.513417512	17.91096517
522.227	53.76995522	10.40830383	7.522650547	17.90240846
523.191	53.86392488	10.40178418	7.529101194	17.89385821
524.155	53.94467463	10.39411881	7.535331642	17.88562786
525.12	54.0115806	10.38613378	7.54407806	17.87794776
526.084	54.0684607	10.3779604	7.555800896	17.87122139
527.048	54.12079154	10.3702599	7.569836915	17.86623731
528.012	54.17560647	10.36494149	7.585371493	17.86403632
528.977	54.23748507	10.36281199	7.601144179	17.86558607
529.941	54.30971542	10.36345672	7.617609204	17.87156866
530.905	54.39395821	10.36577716	7.635794826	17.88235224
531.869	54.48978856	10.3691809	7.655322687	17.89814179
532.833	54.59621642	10.37370781	7.675353532	17.91922537
533.798	54.71398209	10.37902373	7.69570796	17.94595572
534.762	54.84437811	10.38527746	7.717517761	17.97869303
535.726	54.99112139	10.39256104	7.74179791	18.01742736
536.69	55.15562388	10.40093915	7.768129453	18.06156318
537.655	55.33375572	10.40987149	7.796528607	18.11021891
538.619	55.5190602	10.41866055	7.827335174	18.16252239
539.583	55.70520498	10.42721577	7.860261642	18.21768358
540.547	55.89220846	10.43665458	7.894826866	18.27460846
541.512	56.07739055	10.44715209	7.931787264	18.3320796
542.476	56.25689204	10.45877547	7.972685672	18.38911343
543.44	56.43010448	10.47118542	8.017168607	18.44525871
544.404	56.60109602	10.48350134	8.063323682	18.50057711
545.369	56.77102488	10.49479388	8.109361194	18.55544826
546.333	56.93889652	10.50507149	8.155816766	18.61030846
547.297	57.10418756	10.51474413	8.202643532	18.66564577
548.261	57.26848358	10.5237705	8.249099851	18.72210896
549.226	57.43478607	10.53199338	8.294964378	18.78049005
550.19	57.60481592	10.53918791	8.341051841	18.84155821

551.154	57.77814428	10.54616403	8.38809	18.90584328
552.118	57.94831045	10.5529909	8.436282587	18.97358557
553.082	58.11327861	10.55971726	8.486330945	19.04497861
554.047	58.27422388	10.56657647	8.538469801	19.12033234
555.011	58.43205821	10.57366801	8.591741642	19.20008856
555.975	58.58668209	10.58070731	8.644952886	19.28462786
556.939	58.74116119	10.58723567	8.697719353	19.37401244
557.904	58.89992537	10.5941302	8.751325871	19.46794328
558.868	59.064	10.6014491	8.805130945	19.56575672
559.832	59.22836219	10.60933617	8.85837209	19.66677861
560.796	59.38988905	10.6179098	8.91155597	19.7705398
561.76	59.54855771	10.62753269	8.965222438	19.8765602
562.725	59.70317512	10.63871776	9.019017114	19.98415622
563.689	59.85122687	10.65215756	9.072581095	20.09241891
564.653	59.99658557	10.6675302	9.12671204	20.20068905
565.617	60.14542289	10.68438567	9.181765274	20.30878259
566.582	60.3020005	10.70185488	9.23627194	20.4169995
567.546	60.46858358	10.71892333	9.288432736	20.52589204
568.51	60.64442488	10.73517781	9.337486269	20.63589751
569.474	60.83261642	10.75127791	9.384805174	20.74717363
570.439	61.03906169	10.76888209	9.431299154	20.85971891
571.403	61.26681343	10.78796557	9.477055821	20.97346716
572.367	61.50923433	10.80696766	9.522133781	21.08832438
573.331	61.75695373	10.82501891	9.567542836	21.20426617
574.295	62.00446219	10.84290532	9.614649303	21.321399
575.26	62.25053383	10.86086204	9.664890299	21.44002935
576.224	62.49796368	10.87819239	9.718217662	21.56080398
577.188	62.74649353	10.8939301	9.77229602	21.68451692
578.153	62.99182687	10.90703114	9.82544607	21.81173184
579.117	63.23198507	10.91734393	9.877926716	21.94259851
580.081	63.47050199	10.92574338	9.931140647	22.07688259
581.045	63.71086915	10.93345582	9.986284229	22.214099
582.009	63.94930348	10.93976388	10.04342687	22.35382239
582.974	64.18216318	10.94454184	10.10345925	22.49596318
583.938	64.40794726	10.94804796	10.16721	22.64064229
584.902	64.6259209	10.95089229	10.23442045	22.78789204
585.866	64.8343602	10.95368975	10.30453363	22.93767214
586.831	65.03302189	10.95654005	10.37703189	23.09003781
587.795	65.22249701	10.95845871	10.45300264	23.24530348
588.759	65.4058806	10.95940005	10.53207617	23.40377313
589.723	65.58714129	10.95965766	10.61269662	23.56551841
590.688	65.77192886	10.95963065	10.69392886	23.73017861
591.652	65.96512338	10.95997846	10.77622871	23.89696318
592.616	66.17022786	10.96171075	10.86089701	24.06504179
593.58	66.38464975	10.96526861	10.94571841	24.23389154
594.544	66.59996517	10.97009264	11.02912701	24.40334527
595.509	66.80865124	10.97572796	11.11128313	24.57336468

596.473	67.01249552	10.98192597	11.1940105	24.74403831
597.437	67.21459055	10.98836428	11.27817114	24.91550647
598.401	67.41132139	10.99547522	11.36167537	25.08796617
599.366	67.59622985	11.00355184	11.44107119	25.26165423
600.33	67.76904925	11.01263741	11.51592443	25.43668706
601.294	67.9327393	11.02246826	11.58764025	25.61282139
602.258	68.09194478	11.03359612	11.65696532	25.78946965
603.222	68.25013383	11.04712746	11.7243007	25.96584328
604.187	68.40473134	11.06432697	11.79075373	26.14124925
605.151	68.55167861	11.08511055	11.85727592	26.31550348
606.115	68.68825323	11.10902249	11.92459493	26.48874826
607.08	68.80978905	11.13507075	11.99382488	26.6610005
608.044	68.91221045	11.16305483	12.06488279	26.83207214
609.008	68.99321542	11.19288368	12.13701841	27.00179502
609.972	69.05589453	11.22421005	12.20968289	27.16992587
610.936	69.10496418	11.25684289	12.28307194	27.336
611.901	69.14790697	11.2917598	12.35667473	27.49922189
612.865	69.18460995	11.33003443	12.42985214	27.65867562
613.829	69.21354428	11.37187672	12.50243692	27.81357015
614.793	69.23466468	11.41726129	12.57404269	27.96359104
615.758	69.25008209	11.46564687	12.6440506	28.10908259
616.722	69.26247114	11.51622746	12.7107991	28.25068557
617.686	69.27514129	11.56869015	12.7750593	28.38903035
618.65	69.2904791	11.62333741	12.83817557	28.52472189
619.615	69.31200697	11.67938318	12.90011279	28.65854527
620.579	69.33791343	11.73581204	12.95831836	28.7914005
621.543	69.36212886	11.79292896	13.0106908	28.92424776
622.507	69.38211443	11.85086328	13.05766826	29.05792189
623.471	69.40011095	11.91006726	13.1016904	29.19305124
624.436	69.41560846	11.97140706	13.14390771	29.33004478
625.4	69.4295592	12.03554388	13.18398333	29.46918856
626.364	69.44651393	12.10189711	13.22109726	29.61082687
627.328	69.46643881	12.17056776	13.25689378	29.75556269
628.293	69.48714826	12.24167985	13.29380423	29.90415721
629.257	69.50224627	12.31513731	13.33369279	30.05717562
630.221	69.50449751	12.39058657	13.37534453	30.21492537
631.185	69.49135075	12.46816129	13.41784652	30.37763881
632.149	69.46762687	12.54740746	13.46294204	30.54532537
633.114	69.4396005	12.62774716	13.51184801	30.71742736
634.078	69.40871343	12.70897522	13.5648505	30.89301045
635.042	69.37287313	12.7911896	13.62170821	31.0710592
636.006	69.33183483	12.87398154	13.68172264	31.25079005
636.971	69.28907264	12.95653731	13.74419478	31.43182488
637.935	69.24585522	13.03874204	13.80885945	31.61401592
638.899	69.20150199	13.11980587	13.87526045	31.79714677
639.863	69.15278905	13.19901731	13.94254602	31.98070398
640.828	69.09433035	13.27613403	14.0096898	32.16407015

641.792	69.02352239	13.35105871	14.07530363	32.3466995
642.756	68.94348308	13.42237532	14.1377708	32.52810348
643.72	68.8544204	13.4886693	14.1990295	32.70779403
644.685	68.75385373	13.55048905	14.26117279	32.88528706
645.649	68.63909154	13.60912935	14.32388473	33.06017015
646.613	68.51173781	13.66497353	14.38598274	33.23214328
647.577	68.37594677	13.71670284	14.44626502	33.40099204
648.542	68.23495473	13.76173	14.50269935	33.56653632
649.506	68.09330149	13.79922741	14.5543098	33.72880299
650.47	67.9492204	13.83026348	14.6030103	33.88815622
651.434	67.79721294	13.855351	14.65083468	34.04508856
652.398	67.63184378	13.87445905	14.69712075	34.19996468
653.363	67.45256269	13.88759587	14.74030284	34.35289751
654.327	67.2656	13.89555308	14.78255259	34.50385871
655.291	67.07696617	13.89903965	14.82695184	34.65272736
656.255	66.88829602	13.89889786	14.87338876	34.79941741
657.22	66.70009204	13.89666602	14.91971945	34.94393582
658.184	66.5138194	13.89355856	14.96517393	35.08635871
659.148	66.32939403	13.89036502	15.0103691	35.22682637
660.112	66.14301294	13.88781925	15.05620925	35.36548557
661.077	65.95124677	13.88627299	15.10283338	35.50211194
662.041	65.75508458	13.88545607	15.14896761	35.63620796
663.005	65.5557199	13.88617846	15.19329617	35.76715075
663.969	65.35751841	13.88999239	15.234879	35.89445373
664.933	65.16692289	13.89815955	15.2742206	36.01781791
665.898	64.9873393	13.91077547	15.31345557	36.13714129
666.862	64.81740299	13.92666104	15.35461428	36.25252836
667.826	64.65337164	13.94483915	15.39564239	36.36420697
668.79	64.48915572	13.96490881	15.43451104	36.47245174
669.755	64.32381542	13.98626453	15.47075602	36.57741692
670.719	64.16174478	14.0080307	15.50382408	36.67917711
671.683	64.00479751	14.02948741	15.53302562	36.77785871
672.647	63.8544791	14.0517695	15.55907289	36.87377463
673.612	63.70625572	14.07589139	15.58312915	36.96726766
674.576	63.55776915	14.10232274	15.60530488	37.0584995
675.54	63.41001045	14.13140085	15.6248893	37.14742587
676.504	63.26565622	14.16379886	15.64324458	37.23388607
677.468	63.12557512	14.19896502	15.66220284	37.31797015
678.433	62.98672587	14.23544264	15.68318065	37.40002886
679.397	62.84627015	14.27280582	15.70666493	37.48041045
680.361	62.70358109	14.31210134	15.73209547	37.55907861
681.325	62.55865025	14.35341826	15.7593692	37.63564627
682.29	62.40792488	14.39405557	15.78775736	37.70954627
683.254	62.24857114	14.43206851	15.81708219	37.78019701
684.218	62.08189204	14.46770284	15.84745746	37.84688607
685.182	61.91127761	14.50256801	15.87895751	37.90896269
686.147	61.73947363	14.53837796	15.91066816	37.96593234

687.111	61.56921244	14.57560632	15.94137408	38.0176597
688.075	61.39908209	14.61396502	15.97201736	38.06441642
689.039	61.22679005	14.65274711	16.00411488	38.10679502
690.004	61.05189204	14.69133567	16.03827308	38.14552985
690.968	60.87341692	14.72962572	16.07370493	38.18138358
691.932	60.68927612	14.768569	16.10833478	38.21511294
692.896	60.50149104	14.8092302	16.13964522	38.24744478
693.86	60.31431294	14.85243667	16.1686303	38.2790607
694.825	60.12803483	14.89865756	16.197289	38.31061493
695.789	59.94605075	14.94924612	16.22526612	38.34277662
696.753	59.77384478	15.00484662	16.25105418	38.3762204
697.717	59.61623035	15.06414741	16.27439348	38.41159652
698.682	59.47185025	15.12527736	16.29728104	38.4493806
699.646	59.33702239	15.18797736	16.32316264	38.48984627
700.61	59.2094791	15.25251338	16.35261886	38.53337363
701.574	59.08792687	15.31835144	16.38637607	38.58038358
702.538	58.97169254	15.38538378	16.42396562	38.63107512
703.503	58.85881692	15.45408771	16.46329348	38.68527065
704.467	58.744899	15.52399174	16.50211438	38.74254328
705.431	58.62624577	15.59324378	16.54006164	38.80227512
706.395	58.50305473	15.66184139	16.5779696	38.86371144
707.36	58.37722836	15.73022139	16.6168691	38.9260602
708.324	58.25128109	15.79819682	16.65749647	38.98870398
709.288	58.1283592	15.86548866	16.69956214	39.05135075
710.252	58.01216567	15.93271408	16.74373378	39.114101
711.217	57.89725771	16.00000557	16.7921696	39.17738607
712.181	57.77735323	16.06724672	16.84564124	39.24171741
713.145	57.6527005	16.13417358	16.9019104	39.30755075
714.109	57.52897065	16.20014637	16.95699299	39.37526617
715.073	57.40839801	16.26489299	17.00862134	39.44499104
716.038	57.29333881	16.32844597	17.05850244	39.51642338
717.002	57.1871791	16.38994199	17.10956731	39.58895672
717.966	57.09322189	16.44766244	17.16107692	39.66198209
718.931	57.01574279	16.50078308	17.21093025	39.73493184
719.895	56.95478806	16.54896622	17.25954846	39.80712736
720.859	56.90281443	16.5913209	17.30807841	39.87764428
721.823	56.84971244	16.62724836	17.35650428	39.9453393
722.787	56.79170149	16.65727856	17.40472572	40.00917065
723.752	56.72863483	16.68127308	17.45138	40.06837413
724.716	56.65943234	16.69819308	17.49572706	40.12224826
725.68	56.58144726	16.70851299	17.5366602	40.16990597
726.644	56.49407761	16.7134702	17.57402861	40.21028209
727.609	56.40058607	16.71350254	17.60891035	40.24228607
728.573	56.30375672	16.70889308	17.64318308	40.26494279
729.537	56.20346468	16.70029756	17.67757463	40.27773532
730.501	56.10356318	16.68845279	17.71234229	40.28072736
731.466	56.01219851	16.67453338	17.74663184	40.27433731

732.43	55.93540498	16.66024383	17.77940647	40.25913035
733.394	55.86949652	16.64648264	17.81099403	40.23575224
734.358	55.80581343	16.63246373	17.84081244	40.2050403
735.322	55.7432204	16.6182891	17.86696866	40.16804229
736.287	55.68861493	16.60432294	17.88753582	40.12576468
737.251	55.64715423	16.59102443	17.90315124	40.07888458
738.215	55.61583881	16.57903786	17.91652637	40.02754726
739.179	55.59239801	16.56865577	17.92937463	39.97159652
740.144	55.57204975	16.55931498	17.94105672	39.91112189
741.108	55.54823284	16.55051498	17.95092786	39.84646368
742.072	55.51771343	16.54324781	17.95933134	39.77795174
743.036	55.47641642	16.53855677	17.96645423	39.70584876
744	55.41819005	16.53625229	17.97121045	39.63042239
744.965	55.34186119	16.5354309	17.97274677	39.55203333
745.929	55.25317662	16.53490254	17.97165373	39.47123383
746.893	55.15253781	16.53286821	17.96796418	39.38849453
747.857	55.03994726	16.52959806	17.96165871	39.30405323
748.822	54.91886866	16.52665776	17.95407662	39.21812438
749.786	54.79699403	16.5255294	17.94807015	39.13108756
750.75	54.67930647	16.5268294	17.94553085	39.0435393
751.714	54.56341592	16.53075279	17.94553532	38.95622786
752.679	54.44677562	16.53787567	17.94686219	38.86998657
753.643	54.33327015	16.54773637	17.948801	38.78538856
754.607	54.22531194	16.55930005	17.95087861	38.70263333
755.571	54.1173806	16.57217866	17.95283333	38.62167861
756.536	54.00395871	16.58607766	17.95443383	38.54250149
757.5	53.8904199	16.60091846	17.95585622	38.4653005
758.464	53.77909552	16.61795726	17.95806318	38.39022587
759.428	53.66787761	16.63783239	17.96204726	38.31681642
760.393	53.55365274	16.66034483	17.96780647	38.24406119
761.357	53.43378856	16.68475627	17.9758791	38.17077264
762.321	53.30516766	16.7102901	17.98600398	38.09605473
763.285	53.16258458	16.7371095	17.99607662	38.01943831
764.25	53.00329254	16.76631498	18.00512786	37.9405194
765.214	52.82899204	16.79935577	18.01401194	37.85884378
766.178	52.64456716	16.83561846	18.02324428	37.77403831
767.142	52.45428358	16.87308761	18.03200149	37.68576915
768.106	52.26068358	16.90940851	18.03910796	37.59371244
769.071	52.068301	16.94353338	18.04389353	37.49761443
770.035	51.87988408	16.97578313	18.04625373	37.39711244
770.999	51.7009393	17.00852542	18.04813632	37.29200249
771.963	51.53529204	17.04416721	18.05151891	37.18252836
772.928	51.38315224	17.08377766	18.05652139	37.0691607
773.892	51.24143532	17.12707418	18.06087662	36.95240846
774.856	51.10759204	17.17344532	18.06231144	36.83275771
775.82	50.98197264	17.22288458	18.06088209	36.71070547
776.784	50.8656	17.27399866	18.05668358	36.58667114

777.749	50.75831642	17.32533194	18.04898856	36.46104179
778.713	50.65901741	17.37629632	18.03723632	36.33423035
779.677	50.5715209	17.42654104	18.02188408	36.20677612
780.641	50.50041443	17.47634483	18.0040204	36.0793204
781.606	50.44164627	17.52667478	17.98413682	35.95225323
782.57	50.38411791	17.5768802	17.96354627	35.82566667
783.534	50.32029005	17.62589463	17.94390846	35.69972687
784.498	50.24868159	17.67309134	17.9261403	35.574899
785.463	50.17199204	17.71862791	17.90826617	35.45191443
786.427	50.09290149	17.76323234	17.88823483	35.33147065
787.391	50.01242587	17.8065	17.86690199	35.2139403
788.355	49.93128657	17.84661542	17.84631741	35.09948657
789.319	49.8512806	17.88129303	17.82821045	34.98819104
790.284	49.77286119	17.90973383	17.81192736	34.87988209
791.248	49.69897164	17.93235572	17.79680597	34.77420647
792.212	49.63576617	17.9501602	17.78443035	34.67075672
793.177	49.58454179	17.96369403	17.77862537	34.56904776
794.141	49.53960846	17.9738194	17.78015871	34.46877015
795.105	49.49538209	17.98166119	17.78626169	34.36977413
796.069	49.45245672	17.98723483	17.79419353	34.27180746
797.033	49.41362836	17.98978955	17.80186716	34.17446617
797.998	49.37861095	17.98840597	17.8082194	34.077301
798.962	49.34301592	17.98225224	17.81244975	33.9797801
799.926	49.30597612	17.97090597	17.81310846	33.88121294
800.89	49.27371592	17.95474378	17.8079597	33.78096866
801.855	49.24830846	17.93393333	17.79661244	33.67858358
802.819	49.22876567	17.90881791	17.77997065	33.57376965
803.783	49.21128756	17.88016468	17.76010597	33.46631343
804.747	49.18885423	17.84831194	17.73893881	33.35601194
805.712	49.15611741	17.81159851	17.7168592	33.24285622
806.676	49.11762139	17.76779005	17.69186567	33.1270209
807.64	49.07909055	17.71766269	17.66220448	33.00872736
808.604	49.04140199	17.66475721	17.62917065	32.88806866
809.568	49.00251095	17.61005323	17.59361393	32.76491493
810.533	48.959501	17.55317463	17.55631642	32.63900647
811.497	48.91246567	17.49366468	17.51908557	32.5102597
812.461	48.86590448	17.43112338	17.48354229	32.37866517
813.425	48.82243582	17.36673781	17.44971791	32.24405473
814.39	48.78311493	17.30245522	17.41802488	32.10621393
815.354	48.748199	17.23856816	17.38990249	31.96494677
816.318	48.7172796	17.17426219	17.36531045	31.82012786
817.282	48.68980697	17.1093597	17.34084876	31.67175721
818.246	48.66918507	17.04411194	17.31412239	31.51982836
819.211	48.6564194	16.97846169	17.28470398	31.36427711
820.175	48.64596269	16.91260896	17.25208507	31.20501393
821.139	48.63256318	16.84660597	17.21494328	31.04200398
822.104	48.61692388	16.78044726	17.17186269	30.8751806

823.068	48.60513682	16.71321791	17.12281294	30.70453881
824.032	48.60304975	16.64400249	17.07052438	30.53019055
824.996	48.60579104	16.57213294	17.01679184	30.35224378
825.96	48.60616318	16.49803234	16.95977731	30.17083333
826.925	48.60222537	16.4223993	16.89831697	29.986101
827.889	48.59763234	16.34570463	16.83202935	29.79829055
828.853	48.5991602	16.26818692	16.76132194	29.60774876
829.817	48.61038905	16.1920302	16.68729806	29.41471692
830.782	48.62471791	16.12141358	16.61083194	29.21933284
831.746	48.6372801	16.05765766	16.5320191	29.02171443
832.71	48.64844478	15.99908552	16.44992498	28.8220597
833.674	48.66076318	15.94541886	16.36602672	28.62085572
834.639	48.67636716	15.89647259	16.28204269	28.41896269
835.603	48.69525174	15.85166363	16.19832741	28.21724776
836.567	48.71589652	15.81207557	16.11500856	28.01643433
837.531	48.74053682	15.77874075	16.02986562	27.81723035
838.495	48.77332935	15.75061189	15.94386294	27.62040647
839.46	48.81925025	15.72641537	15.85938493	27.42673333
840.424	48.87966766	15.70607159	15.7771991	27.23692537
841.388	48.95111199	15.69016363	15.69612851	27.05176567
842.352	49.02884478	15.67945567	15.61586517	26.87221045
843.317	49.1124393	15.6737507	15.53743935	26.69909154
844.281	49.20210597	15.67155915	15.46240174	26.53287164
845.245	49.30094279	15.67177756	15.39179657	26.37367015
846.209	49.41275174	15.67321189	15.32730318	26.22155274
847.173	49.53831542	15.675589	15.2701509	26.07657015
848.138	49.67161144	15.67894871	15.21841761	25.93866169
849.102	49.80854975	15.68381338	15.16888701	25.8075408
850.066	49.95596219	15.69084572	15.12152403	25.68259353
851.03	50.12041592	15.69981985	15.0783494	25.56315075
851.995	50.29648706	15.71001587	15.04017179	25.4485597
852.959	50.4752194	15.72119249	15.00565637	25.33817662
853.923	50.65008955	15.73296662	14.97273846	25.23138259
854.887	50.82153831	15.74458303	14.94111806	25.12761791
855.852	50.98789652	15.7557507	14.91166284	25.0264607
856.816	51.14808209	15.76472085	14.8844494	24.92784428
857.78	51.30194179	15.7692298	14.85897925	24.83186965
858.744	51.44946269	15.76800592	14.83441308	24.73851095
859.709	51.59234677	15.76189846	14.80957179	24.64765323
860.673	51.73191294	15.75233428	14.78348672	24.55926567
861.637	51.86895721	15.73986164	14.75911308	24.47339751
862.601	52.00853831	15.72413826	14.73697726	24.39007015
863.566	52.15544229	15.70540642	14.71417577	24.30939602
864.53	52.30792587	15.68452383	14.68922055	24.23170597
865.494	52.45677811	15.66192532	14.66345886	24.15732388
866.458	52.59909652	15.63637806	14.63793527	24.08629403
867.422	52.73856965	15.6063895	14.61230383	24.01856119

868.387	52.87930896	15.57185965	14.58627871	23.95425721
869.351	53.01991244	15.53279448	14.56126284	23.8936801
870.315	53.15501343	15.48890741	14.53810095	23.83701095
871.279	53.2818209	15.44100741	14.51499065	23.78406418
872.244	53.40245423	15.39074622	14.48845726	23.73427612
873.208	53.5206	15.33912617	14.45748428	23.68696219
874.172	53.63411244	15.28597985	14.42340418	23.64162836
875.136	53.73792537	15.23168005	14.38719144	23.59777015
876.101	53.83486866	15.17861174	14.34987418	23.55474527
877.065	53.92810896	15.12788726	14.31324915	23.51175174
878.029	54.0172398	15.07808134	14.27818945	23.46802189
878.993	54.10261692	15.0271402	14.24286557	23.42296169
879.957	54.18611741	14.97396761	14.20593537	23.37622687
880.922	54.26600547	14.91955443	14.1677908	23.32745572
881.886	54.34096318	14.86471204	14.1273098	23.27614279
882.85	54.41178706	14.80989373	14.08308264	23.22167662
883.814	54.47858607	14.75534826	14.03554522	23.16351891
884.779	54.54165721	14.70117677	13.98574821	23.10119353
885.743	54.60387015	14.64668234	13.93374274	23.03426169
886.707	54.66439254	14.59116164	13.87923498	22.9624209
887.671	54.71682886	14.53422791	13.82344537	22.88554328
888.636	54.75764925	14.47528831	13.76718433	22.80367463
889.6	54.79236766	14.41330572	13.71163358	22.71717861
890.564	54.82380647	14.34772741	13.65775557	22.62679055
891.528	54.84610647	14.2789798	13.60520443	22.53333582
892.492	54.85463085	14.20742189	13.55129736	22.43756567
893.457	54.84892687	14.13256463	13.49351085	22.34020796
894.421	54.831801	14.05345159	13.43133129	22.24184925
895.385	54.8045801	13.97175269	13.36485204	22.14292836
896.349	54.76775025	13.88960219	13.2957709	22.04387811
897.314	54.72436965	13.80788095	13.22715348	21.94508259
898.278	54.67826716	13.72686104	13.16184697	21.84679403
899.242	54.63158408	13.64726786	13.10110517	21.74945423
900.206	54.58334279	13.56864871	13.04485975	21.65370746
901.171	54.53175821	13.49033184	12.99021463	21.56028856
902.135	54.47519453	13.41272592	12.93351567	21.46982985
903.099	54.40973234	13.33723129	12.87403254	21.3827199
904.063	54.33403731	13.26509139	12.8120796	21.29898458
905.028	54.25496567	13.19617333	12.74713851	21.21838557
905.992	54.17914428	13.13035015	12.67970338	21.14056269
906.956	54.10554129	13.06828726	12.61131905	21.06521642
907.92	54.02773085	13.01129284	12.54372965	20.99197562
908.885	53.94238955	12.95945139	12.47912886	20.9204597
909.849	53.84762836	12.91240711	12.41947965	20.85049453
910.813	53.74633483	12.87075637	12.36564602	20.78217065
911.777	53.64042637	12.83528124	12.31747468	20.71583881
912.741	53.52791244	12.80656234	12.27433736	20.65206965

913.706	53.40715323	12.78436085	12.23332791	20.59139851
914.67	53.28185025	12.76783697	12.19149209	20.53403881
915.634	53.15757065	12.75537925	12.14772796	20.48009055
916.598	53.03752637	12.74628522	12.10323881	20.42962687
917.563	52.92334428	12.74106532	12.05956174	20.38256667
918.527	52.81456468	12.74245488	12.01698831	20.3388005
919.491	52.71376716	12.75041159	11.97680955	20.298399
920.455	52.62375522	12.76219517	11.94001159	20.26168507
921.419	52.54384975	12.77527328	11.9060199	20.22922338
922.384	52.47234577	12.78842254	11.87246552	20.20170945
923.348	52.40650796	12.80135886	11.83665134	20.17948408
924.312	52.33743184	12.81461756	11.79646537	20.16246915
925.276	52.25616119	12.82866085	11.75232647	20.15036269
926.241	52.16084527	12.84266383	11.7058406	20.14283532
927.205	52.05799552	12.85579965	11.65806493	20.13960498
928.169	51.95247065	12.86842851	11.61122537	20.14031791
929.133	51.84436667	12.88162104	11.56724239	20.14445075
930.098	51.72820697	12.89613597	11.52659597	20.15152239
931.062	51.59755323	12.91191308	11.48942542	20.16119303
932.026	51.44938358	12.92783498	11.4574293	20.17341144
932.99	51.28373881	12.94356532	11.43008726	20.18828905
933.955	51.10723234	12.95977428	11.40352861	20.20575871
934.919	50.92700249	12.97683249	11.37624915	20.2255398
935.883	50.74758557	12.99405836	11.34821289	20.24723682
936.847	50.57383333	13.01000363	11.3197693	20.27026219
937.811	50.41178706	13.02384741	11.29166935	20.29390846
938.776	50.26205821	13.03563945	11.26440373	20.31761592
939.74	50.11915274	13.04673697	11.23759124	20.34095821
940.704	49.98234677	13.05865736	11.21175811	20.3636408
941.668	49.85389303	13.07100015	11.1878596	20.38561144
942.633	49.73556915	13.08147179	11.16515647	20.40701144
943.597	49.62405025	13.08760562	11.14101164	20.42804826
944.561	49.51462637	13.08863398	11.11319726	20.44864328
945.525	49.40511443	13.08533995	11.08129279	20.46853781
946.49	49.29401741	13.0788708	11.04697771	20.48754179
947.454	49.17525423	13.07044244	11.01276672	20.50576915
948.418	49.047499	13.06108423	10.98054617	20.52357861
949.382	48.91673682	13.05070612	10.95070468	20.5414602
950.346	48.78767065	13.03951905	10.92272408	20.55986667
951.311	48.65742338	13.02752005	10.89635443	20.57903532
952.275	48.52158905	13.014031	10.87000269	20.59928358
953.239	48.37673632	12.99855388	10.84230517	20.62126667
954.203	48.22340697	12.98095488	10.81479622	20.64568109
955.168	48.06667065	12.96135886	10.78872756	20.67301343
956.132	47.91053433	12.94067776	10.76186488	20.70340547
957.096	47.75775572	12.91838373	10.73293104	20.73678109
958.06	47.6084592	12.89219517	10.70497085	20.77304527

959.024	47.45869403	12.86017826	10.68044995	20.81214378
959.989	47.30420896	12.82263846	10.6599201	20.85402338
960.953	47.14484677	12.78103398	10.64367483	20.89866468
961.917	46.98479104	12.73699552	10.63288328	20.94603085
962.881	46.82529502	12.69186502	10.62822408	20.99598308
963.846	46.66568557	12.64666458	10.62990418	21.04834129
964.81	46.50257114	12.59993841	10.63658726	21.10279701
965.774	46.33132985	12.54928294	10.64503701	21.15883184
966.738	46.15025473	12.49372234	10.65344846	21.21585025
967.703	45.96266219	12.43422592	10.66312806	21.27329154
968.667	45.77516169	12.3724403	10.67645244	21.33084627
969.631	45.59291741	12.30977308	10.69475791	21.38831144
970.595	45.41413682	12.24802851	10.71765841	21.44549204
971.56	45.23363035	12.18862373	10.74198179	21.50222239
972.524	45.04753383	12.13154453	10.76481264	21.55843184
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975.417	44.41894478	11.97292209	10.80508229	21.7227597
976.381	44.19786119	11.92359891	10.80687184	21.77568408
977.345	43.98436368	11.87624537	10.80236886	21.82732239
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979.273	43.57630647	11.78709706	10.77540119	21.9257194
980.238	43.36844478	11.74257672	10.75918826	21.97214577
981.202	43.15744826	11.69562751	10.74641811	22.01637214
982.166	42.94573532	11.64711881	10.73627682	22.05802438
983.13	42.73549801	11.59940831	10.72527731	22.09681095
984.095	42.52864428	11.55399338	10.71176139	22.1324796
985.059	42.32449353	11.51127343	10.69521264	22.16484229
986.023	42.11768308	11.47132139	10.67501015	22.19387065
986.987	41.90556418	11.43440488	10.65113154	22.21965771
987.952	41.69059701	11.39930313	10.62381761	22.24214478
988.916	41.47617164	11.36439567	10.5944002	22.26125871
989.88	41.26541244	11.32972925	10.56411313	22.27722438
990.844	41.06086418	11.29618318	10.53422607	22.29056468
991.808	40.86322239	11.26420716	10.50616189	22.30165373
992.773	40.67	11.23388144	10.48183055	22.31084726
993.737	40.47815771	11.20563542	10.46157433	22.31891045
994.701	40.28511244	11.18001114	10.44458527	22.32688806
995.665	40.09171741	11.1571705	10.43145493	22.33578109
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997.594	39.71698408	11.11805657	10.41545891	22.35968209
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1004.34	38.6873806	11.05149537	10.47405741	22.59848308
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1007.24	38.27202388	11.05107308	10.55255144	22.80200547
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1011.09	37.65542786	11.09329348	10.65489323	23.16457861
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1077.62	33.67534229	11.05434109	16.54693706	34.1931607
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1079.55	33.58683184	11.07303438	16.79341915	34.59837114
1080.52	33.53266866	11.0850108	16.91896423	34.80948706
1081.48	33.47974776	11.09909826	17.04741552	35.02665423
1082.45	33.43903532	11.116809	17.17677657	35.24975124
1083.41	33.40739851	11.13918512	17.30504174	35.47819005
1084.38	33.37520199	11.16615448	17.43094562	35.71099204
1085.34	33.34073085	11.19765134	17.55316095	35.94718856
1086.3	33.30622985	11.23369483	17.67131876	36.18603383
1087.27	33.27248259	11.27325109	17.78900975	36.42691095
1088.23	33.23677861	11.31530592	17.90969328	36.66925075
1089.2	33.20019453	11.358971	18.0332601	36.91259453
1090.16	33.16470746	11.40384587	18.15749796	37.15674677
1091.12	33.12838408	11.44984075	18.28054721	37.40180945
1092.09	33.08941542	11.49750443	18.40112189	37.64825373
1093.05	33.05182786	11.54741552	18.51859005	37.89664428
1094.02	33.02127065	11.59977149	18.6343698	38.14747363

1094.98	32.99738806	11.6544993	18.75220249	38.40105224
1095.95	32.97719701	11.71084751	18.87520095	38.65763383
1096.91	32.96016766	11.76722423	19.00355423	38.91752935
1097.87	32.9469796	11.8218308	19.1365405	39.1810403
1098.84	32.93654478	11.87395781	19.2744592	39.4483204
1099.8	32.93103483	11.92348448	19.41740925	39.71983731
1100.77	32.93349303	11.97101254	19.56495677	39.99632388
1101.73	32.94590746	12.01692289	19.71670985	40.27844577
1102.69	32.96836418	12.06081955	19.87151811	40.56657264
1103.66	33.00325522	12.10354841	20.02851657	40.86062786
1104.62	33.05125423	12.14663348	20.18914274	41.16007363
1105.59	33.10917065	12.19050811	20.35238771	41.46402488
1106.55	33.17290398	12.23424144	20.51631955	41.77145274
1107.52	33.23897861	12.27668323	20.68150164	42.08153483
1108.48	33.30570149	12.31821657	20.85065537	42.39392886
1109.44	33.37435473	12.36012602	21.02600557	42.70852537
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1112.34	33.58924527	12.48124294	21.58212632	43.66532886
1113.3	33.65082388	12.51659816	21.76909363	43.98890945
1114.27	33.70126169	12.5496504	21.95557517	44.31486866
1115.23	33.73716318	12.58199816	22.14318527	44.64295075
1116.19	33.75848756	12.61442353	22.33373965	44.97267463
1117.16	33.76809005	12.64651806	22.52753592	45.3037592
1118.12	33.7718398	12.67660711	22.72396468	45.63631542
1119.09	33.77292587	12.70337925	22.92297124	45.97084975
1120.05	33.77113234	12.72682502	23.12450189	46.30797313
1121.02	33.76797164	12.74758373	23.32596562	46.64826816
1121.98	33.76568657	12.76549567	23.52428279	46.99227313
1122.94	33.76493881	12.77918672	23.71834289	47.3404791
1123.91	33.76519453	12.78818672	23.9096709	47.69309104
1124.87	33.76636368	12.79306184	24.1005708	48.04994378
1125.84	33.77093831	12.79524443	24.29094552	48.41058856
1126.8	33.78071045	12.79619866	24.48304378	48.7744398
1127.77	33.79477761	12.7967504	24.68140542	49.14112488
1128.73	33.81203134	12.7968708	24.8842406	49.51055323
1129.69	33.83216219	12.79648274	25.08934254	49.88272239
1130.66	33.85278308	12.79594642	25.296911	50.25776965
1131.62	33.87474876	12.79563597	25.50656915	50.63591194
1132.59	33.9032393	12.79537925	25.71669547	51.01712687
1133.55	33.94073682	12.79436881	25.92653881	51.40108458
1134.52	33.97933582	12.79212453	26.13549383	51.78721791
1135.48	34.01120697	12.78800214	26.34230179	52.17477562
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1137.41	34.05070547	12.77547975	26.75323234	52.95018607
1138.37	34.057901	12.77069119	26.96242532	53.33630746
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1141.27	34.09151443	12.76146433	27.59656085	54.48703731
1142.23	34.11867363	12.7602494	27.80773214	54.86940149
1143.19	34.14753831	12.76036682	28.01787861	55.25150697
1144.16	34.17680448	12.7610892	28.22599602	55.63311741
1145.12	34.20620448	12.76111458	28.43267015	56.01380896
1146.09	34.23642189	12.75973249	28.63974776	56.39305274
1147.05	34.27051244	12.75822751	28.84955124	56.77054179
1148.01	34.30861692	12.75841358	29.06278259	57.14635721
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1151.87	34.41734826	12.78990164	29.9344005	58.64652438
1152.84	34.43221393	12.80710164	30.14922139	59.02510896
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1154.76	34.44549801	12.8514897	30.56741592	59.79063831
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1169.23	34.0821393	13.31513642	33.53771692	66.18837811
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1173.08	34.15844328	13.44598085	34.4944393	68.07942985
1174.05	34.18286468	13.48349373	34.7393	68.55957861
1175.01	34.21006667	13.52562552	34.98253532	69.04201642
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1178.87	34.29643134	13.73080896	35.95568507	70.99402338
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1182.73	34.37590398	13.98565687	36.93876169	72.99959502
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1187.55	34.52285771	14.37575891	38.13038905	75.61702438
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1192.37	34.75469701	14.81215677	39.3328995	78.33787463
1193.33	34.81107711	14.89973766	39.57833632	78.889301
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1195.26	34.9314199	15.07661239	40.06998856	79.99796169
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1201.05	35.33766965	15.59155756	41.55150498	83.36265174
1202.01	35.42748706	15.66422721	41.801901	83.93188955
1202.98	35.51768657	15.7335307	42.05378706	84.50449005
1203.94	35.60434776	15.79913617	42.30560348	85.0806995
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1205.87	35.76928706	15.91764114	42.80974876	86.24507164
1206.83	35.84363632	15.9702695	43.063399	86.83330746
1207.8	35.9093607	16.01902224	43.31891891	87.42526468
1208.76	35.96770995	16.06507249	43.57509701	88.02081095
1209.72	36.0199393	16.11016652	43.83135871	88.61968308
1210.69	36.06402935	16.1552093	44.09081592	89.22129303
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1212.62	36.12476119	16.24507945	44.62989851	90.43073781
1213.58	36.14930647	16.29002025	44.90951343	91.03770647
1214.55	36.17210547	16.33520433	45.19562786	91.64533134
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1216.47	36.21243632	16.42888095	45.78206418	92.86029851
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1218.4	36.24344776	16.52842323	46.3872607	94.07206716
1219.37	36.25494229	16.5804506	46.6966	94.67541393
1220.33	36.2717597	16.63152025	47.00657562	95.27652886
1221.3	36.29656915	16.68069537	47.314099	95.87542687
1222.26	36.32964179	16.72926005	47.61873383	96.47215124
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1224.19	36.40604975	16.83084015	48.22062886	97.65972239
1225.15	36.43781741	16.88466751	48.5184199	98.25123234
1226.12	36.45825373	16.93930483	48.814001	98.84163284
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1228.05	36.48521294	17.04699189	49.39460398	100.0199279
1229.01	36.50071542	17.09779388	49.67676567	100.6081771
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1231.9	36.51160398	17.24582572	50.49171493	102.3751701
1232.87	36.50354876	17.29589836	50.75961194	102.9675846
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1236.72	36.40144627	17.49873915	51.84198856	105.3679453
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1241.55	36.26693831	17.76368144	53.24528607	108.4258841
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1253.12	36.51069502	18.51555035	56.80675373	115.4810811
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1327.36	34.50963682	21.14920199	73.40562189	148.2884726
1328.33	34.50531791	21.13950149	73.5309194	148.5022189
1329.29	34.51304527	21.1296005	73.65600647	148.7086617
1330.25	34.5295995	21.12145274	73.78356716	148.90799
1331.22	34.54811343	21.11505174	73.9125403	149.1004478
1332.18	34.56370995	21.10860348	74.03851592	149.2861692
1333.15	34.57343333	21.10167463	74.15988358	149.4650697
1334.11	34.57290995	21.09414677	74.27625423	149.6368905
1335.08	34.56419801	21.08569154	74.38685871	149.801204
1336.04	34.5543408	21.07681791	74.49145522	149.9575373
1337	34.5479592	21.06877413	74.58994129	150.1057612
1337.97	34.5445	21.06227363	74.68283781	150.2461642
1338.93	34.54128706	21.05754776	74.77084478	150.3793532
1339.9	34.53454677	21.05441393	74.85448806	150.5059453
1340.86	34.51870547	21.05156368	74.93277512	150.6265771
1341.83	34.49104129	21.04790498	75.00401542	150.7420896
1342.79	34.46017562	21.04336318	75.06765025	150.853393
1343.75	34.43629602	21.0380602	75.12510249	150.9611443
1344.72	34.41936617	21.03184876	75.17954876	151.0654527
1345.68	34.41064975	21.02468856	75.23476965	151.1662438
1346.65	34.41301095	21.01683085	75.2922	151.263602
1347.61	34.42356766	21.00891542	75.35049453	151.3576468
1348.58	34.43593582	21.00242338	75.40798458	151.4485572
1349.54	34.45066169	20.99830249	75.46397711	151.5365473
1350.5	34.47409801	20.99616965	75.51920746	151.6218209
1351.47	34.50634826	20.99519851	75.57603035	151.7046219
1352.43	34.54400746	20.99516667	75.6372995	151.7852587
1353.4	34.58723433	20.99567015	75.70343383	151.863806
1354.36	34.63427662	20.9953602	75.77016169	151.9398856
1355.32	34.6797209	20.99424826	75.83262687	152.0126716
1356.29	34.72403831	20.99368458	75.88975721	152.0811692
1357.25	34.77311791	20.99363632	75.94040199	152.1445771
1358.22	34.8308791	20.99382786	75.98432587	152.2024677
1359.18	34.89430647	20.99545323	76.02296119	152.2548259
1360.15	34.95607512	21.00039154	76.05761393	152.3019055
1361.11	35.00599502	21.00918856	76.08903582	152.3440547
1362.07	35.03837313	21.02027861	76.11754229	152.3814925
1363.04	35.0570204	21.03182886	76.1426602	152.4141095
1364	35.06491891	21.04261791	76.16407264	152.4417214
1364.97	35.06467562	21.05181144	76.18279254	152.464199
1365.93	35.06180547	21.0595005	76.20135622	152.4811891

1366.89	35.0557408	21.06561891	76.22331592	152.49201
1367.86	35.04418706	21.06956965	76.24980199	152.49601
1368.82	35.02682388	21.07115522	76.27880199	152.4930348
1369.79	35.00126667	21.07105572	76.30667114	152.483199
1370.75	34.96595672	21.07013632	76.33024726	152.4664975
1371.72	34.92280398	21.06841791	76.34805025	152.4429602
1372.68	34.87786119	21.06541741	76.36094179	152.4128259
1373.64	34.83522587	21.06006766	76.37104279	152.3765771
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1376.54	34.70130597	21.02267065	76.40465473	152.2368806
1377.5	34.66099055	21.00502388	76.41768756	152.1811343
1378.47	34.625701	20.98633134	76.42860846	152.1212537
1379.43	34.5987199	20.96641194	76.43603184	152.0579801
1380.39	34.58092587	20.94501642	76.43982488	151.9924279
1381.36	34.56491891	20.9229398	76.44201542	151.9258856
1382.32	34.54391592	20.90168308	76.44451393	151.8594229
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1387.14	34.38598507	20.8091791	76.42516716	151.5395473
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1389.07	34.30095871	20.76513234	76.41227662	151.4130348
1390.04	34.2562204	20.74025373	76.40888806	151.3476816
1391	34.2101806	20.71235224	76.40335224	151.2805871
1391.96	34.16495224	20.68316517	76.3939602	151.211592
1392.93	34.124	20.65635274	76.38215274	151.1400299
1393.89	34.08898806	20.63316517	76.36912289	151.0649652
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1395.82	34.02799204	20.5910199	76.33766915	150.9019403
1396.79	34.0016607	20.56968358	76.31928856	150.8136418
1397.75	33.97752985	20.54773383	76.30025323	150.7206716
1398.71	33.95536368	20.52583134	76.28225423	150.622796
1399.68	33.9371592	20.50513831	76.26597065	150.5196965
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1402.57	33.89257761	20.45147612	76.21289851	150.1793483
1403.54	33.86996517	20.43401891	76.1905403	150.0569204
1404.5	33.84380697	20.41563682	76.16511443	149.9308706
1405.46	33.81946219	20.39695672	76.13584776	149.8016617
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1407.39	33.76692836	20.35772438	76.05589751	149.5356418
1408.36	33.72118358	20.33595025	76.00251393	149.4000249
1409.32	33.66052587	20.31150896	75.94341244	149.2635423
1410.29	33.59233035	20.28391642	75.88045522	149.1269303
1411.25	33.5255796	20.25403831	75.81456965	148.9910398

1412.21	33.46508657	20.22264229	75.74691443	148.857005
1413.18	33.41068109	20.19017214	75.67822836	148.7260945
1414.14	33.36320995	20.15815522	75.60865821	148.5992637
1415.11	33.32275423	20.13024478	75.54011592	148.4769851
1416.07	33.28625721	20.10841592	75.47532736	148.359597
1417.04	33.25225423	20.09147861	75.415499	148.2476567
1418	33.22336318	20.07737214	75.36048209	148.1418706
1418.96	33.20222786	20.0653393	75.30999204	148.042801
1419.93	33.18761194	20.05523881	75.26419801	147.9507164
1420.89	33.17419005	20.04708905	75.22361692	147.8655771
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1422.82	33.13176318	20.04069552	75.15791493	147.7153682
1423.79	33.10492687	20.0423209	75.13209701	147.6499055
1424.75	33.07945522	20.04657413	75.11110249	147.5906418
1425.71	33.05515821	20.05229701	75.09346915	147.5371244
1426.68	33.03478657	20.05916816	75.07761841	147.488801
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1428.61	33.02276866	20.08002189	75.05567562	147.405403
1429.57	33.02794378	20.09322139	75.05035473	147.3692488
1430.54	33.0322806	20.10726318	75.0468199	147.3362239
1431.5	33.03688557	20.12247761	75.04402637	147.3061095
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1433.43	33.06262388	20.16044876	75.03341045	147.2535075
1434.39	33.08122836	20.18501393	75.02044229	147.2303881
1435.36	33.09891891	20.21331194	75.00210995	147.2091393
1436.32	33.1149806	20.24583781	74.98079851	147.1897114
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1438.25	33.14497662	20.32535174	74.93428308	147.156
1439.21	33.15706716	20.37131294	74.9117607	147.1422537
1440.18	33.16847015	20.41934428	74.89176269	147.131398
1441.14	33.178301	20.46812289	74.87277662	147.1239552
1442.11	33.18208507	20.51758109	74.85380846	147.1205473
1443.07	33.17611144	20.56852488	74.83550448	147.1219453
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1445.96	33.11729851	20.73701144	74.79653582	147.1609005
1446.93	33.10092388	20.79930647	74.79375522	147.1877015
1447.89	33.09182786	20.86620796	74.79510348	147.2226468
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1451.75	33.21895522	21.1995199	74.87797363	147.4561343
1452.71	33.29015025	21.29861443	74.92001592	147.5421194
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1462.35	34.24441692	22.53557512	75.78729502	149.204796
1463.32	34.3099194	22.66882736	75.92184229	149.453
1464.28	34.36297562	22.80095124	76.06176965	149.7136965
1465.25	34.40519851	22.93344627	76.20759005	149.9857761
1466.21	34.44039055	23.06665274	76.35993483	150.2677463
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1472	34.60521493	23.84845174	77.39526269	152.0764726
1472.96	34.64831642	23.9780806	77.58664229	152.3874328
1473.92	34.6935597	24.10540697	77.77975423	152.7000249
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1477.78	34.97137313	24.60653781	78.57871542	153.9723184
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1579.03	37.10095622	26.96297736	76.36860199	147.8190463
1579.99	37.16030498	26.91092512	76.14648109	147.3392264
1580.95	37.22375771	26.85989826	75.91974726	146.8527716
1581.92	37.28714975	26.80951418	75.68739254	146.3597607
1582.88	37.34962736	26.75868582	75.44965622	145.8606274
1583.85	37.4136806	26.70782413	75.20745323	145.3559483
1584.81	37.47661642	26.6582301	74.96292736	144.8461886
1585.78	37.53269055	26.61031617	74.71851194	144.3316567
1586.74	37.58243184	26.56323109	74.47615124	143.8127527
1587.7	37.62761741	26.51675697	74.2364602	143.2899682
1588.67	37.66784726	26.4714296	73.99826517	142.763801
1589.63	37.70245771	26.42750373	73.76027214	142.2346522
1590.6	37.73130896	26.38441119	73.52155075	141.7028159
1591.56	37.75556219	26.34166642	73.28185871	141.1685174
1592.53	37.77579303	26.29871119	73.04077612	140.6320721

1593.49	37.79108408	26.25427189	72.7974398	140.0939806
1594.45	37.80386169	26.20742264	72.55239552	139.5546642
1595.42	37.8189398	26.15821915	72.3074995	139.014295
1596.38	37.8386597	26.10708284	72.06282537	138.4728393
1597.35	37.86158657	26.05317338	71.8176592	137.9299542
1598.31	37.88477164	25.995251	71.5719592	137.3851478
1599.28	37.90480448	25.93356617	71.32615025	136.8379721
1600.24	37.92331692	25.86942189	71.08115174	136.288007
1601.2	37.95166119	25.80407408	70.83780995	135.734905
1602.17	37.99797313	25.73849796	70.59539005	135.1783254
1603.13	38.05949801	25.67348642	70.35161045	134.6177164
1604.1	38.1286597	25.60857652	70.10530547	134.0524134
1605.06	38.19860547	25.54263493	69.85655174	133.4817363
1606.03	38.26593582	25.47550189	69.60439104	132.9049701
1606.99	38.3295602	25.4073902	69.34769801	132.3215303
1607.95	38.38419204	25.33764279	69.08706965	131.7309577
1608.92	38.4276408	25.26463109	68.82284428	131.1329791
1609.88	38.46623781	25.1873202	68.55284876	130.5275527
1610.85	38.50269353	25.10639368	68.27518806	129.9145826
1611.81	38.53370199	25.02255736	67.98931144	129.2937219
1612.78	38.55673881	24.93535512	67.69597264	128.6646229
1613.74	38.57331443	24.84425667	67.39571244	128.0271488
1614.7	38.58743085	24.74967498	67.08821244	127.3813791
1615.67	38.60224378	24.65244184	66.77346055	126.7274149
1616.63	38.61750547	24.55388348	66.45144438	126.0652592
1617.6	38.62968159	24.45485597	66.12135955	125.3947239
1618.56	38.63675572	24.35405612	65.78414184	124.7156602
1619.52	38.63964726	24.2506109	65.44275985	124.0280871
1620.49	38.6380597	24.14517363	65.0979706	123.3320338
1621.45	38.63056866	24.03803473	64.74737109	122.6275995
1622.42	38.61716716	23.92952721	64.38864154	121.9147692
1623.38	38.60473483	23.82000716	64.02292896	121.1932841
1624.35	38.60236866	23.7095907	63.65403428	120.4629199
1625.31	38.60686716	23.59819	63.28394831	119.7235806
1626.27	38.60786119	23.4852104	62.91314458	118.9752577
1627.24	38.59935721	23.3691607	62.54265965	118.2180388
1628.2	38.58159602	23.24867736	62.1725503	117.4520965
1629.17	38.55803582	23.12281244	61.80054716	116.6778433
1630.13	38.530799	22.99108244	61.42444711	115.8960348
1631.1	38.50137065	22.853881	61.04435786	115.1075771
1632.06	38.47522488	22.71209478	60.66144617	114.3133694
1633.02	38.4559194	22.56710085	60.27455935	113.514179
1633.99	38.43911493	22.41964587	59.88300373	112.7105976
1634.95	38.41967463	22.2695407	59.48926154	111.9031191
1635.92	38.40175771	22.11769801	59.09533065	111.092004
1636.88	38.3936393	21.96489433	58.70106199	110.2772988
1637.85	38.39560149	21.8111307	58.30516303	109.4589871

1638.81	38.40401542	21.65675587	57.90690985	108.6369713
1639.77	38.41657662	21.50155418	57.50649642	107.8110626
1640.74	38.43240697	21.34419736	57.10414458	106.9809949
1641.7	38.45178358	21.18373592	56.70030373	106.1463272
1642.67	38.47170896	21.02147602	56.29381114	105.3063725
1643.63	38.48796169	20.85830433	55.88156716	104.4603899
1644.59	38.50056866	20.69191517	55.46240796	103.6075322
1645.56	38.51064428	20.52101896	55.03635741	102.7464506
1646.52	38.51755572	20.34706711	54.60357701	101.87557
1647.49	38.51981343	20.17125085	54.16520184	100.9935829
1648.45	38.51228756	19.99333483	53.72018627	100.09936
1649.42	38.48938308	19.81244353	53.2659593	99.19178791
1650.38	38.4519592	19.62857547	52.80136393	98.26985806
1651.34	38.40608856	19.44272831	52.32528328	97.33288443
1652.31	38.35640199	19.25536229	51.83577025	96.38076552
1653.27	38.30878259	19.06682761	51.33304955	95.41383269
1654.24	38.2699403	18.8780907	50.81979517	94.43244015
1655.2	38.23836517	18.68917527	50.29687746	93.43683468
1656.16	38.20672886	18.49971308	49.76321657	92.42739537
1657.13	38.17165025	18.30953945	49.21880985	91.40480184
1658.09	38.13627214	18.11803199	48.66603856	90.36983418
1659.06	38.10527413	17.92483448	48.10657791	89.32321627
1660.02	38.0802398	17.72986035	47.54059522	88.26619239
1660.99	38.06031144	17.53365139	46.96857498	87.20069438
1661.95	38.04758856	17.3366494	46.39243716	86.12867746
1662.91	38.04169652	17.13834343	45.8140904	85.05175706
1663.88	38.03592239	16.93850512	45.23388338	83.97144413
1664.84	38.02502189	16.73710512	44.65289418	82.88926204
1665.81	38.00956368	16.53345587	44.0735806	81.80671677
1666.77	37.99417861	16.32746582	43.49669816	80.72523716
1667.74	37.9819194	16.12042055	42.92065149	79.64571577
1668.7	37.97086965	15.91477328	42.342879	78.56844264
1669.66	37.95844975	15.71251308	41.76223562	77.49354413
1670.63	37.94021045	15.51297627	41.1802694	76.42114313
1671.59	37.90767761	15.31413	40.59824393	75.35126353
1672.56	37.86308607	15.11596333	40.01483846	74.2838108
1673.52	37.81715522	14.92012751	39.42911796	73.218769
1674.49	37.77535821	14.72687527	38.8417691	72.15642373
1675.45	37.7374597	14.53500114	38.25365119	71.09724861
1676.41	37.70168657	14.34363597	37.66709095	70.04126403
1677.38	37.66656567	14.1527091	37.08275557	68.98800234
1678.34	37.63275622	13.96243995	36.49834129	67.93714214
1679.31	37.59995274	13.77399716	35.91322856	66.88873219
1680.27	37.56673532	13.58878323	35.32833498	65.84275209
1681.23	37.53174129	13.40696035	34.74500851	64.79899488
1682.2	37.49558905	13.22860662	34.16408687	63.75756353
1683.16	37.46375423	13.05469119	33.58380408	62.71915159

1684.13	37.43948955	12.88540313	33.00290159	61.68467448
1685.09	37.41718209	12.72000065	32.42369766	60.65473269
1686.06	37.39056567	12.55800562	31.8491496	59.62968692
1687.02	37.36320597	12.39867577	31.27916796	58.61020085
1687.98	37.34226517	12.24215388	30.71382861	57.59719388
1688.95	37.32979453	12.09018274	30.15398677	56.59144811
1689.91	37.32560299	11.94370612	29.59749766	55.59345955
1690.88	37.33010945	11.80200313	29.04064458	54.60346303
1691.84	37.34249104	11.66446085	28.48406433	53.62171577
1692.81	37.35869602	11.53059567	27.93106527	52.6486491
1693.77	37.36937612	11.39945736	27.38451433	51.68478045
1694.73	37.37066766	11.27054791	26.84511	50.73071925
1695.7	37.37184279	11.14474741	26.30993821	49.78724761
1696.66	37.37936716	11.02157025	25.77911682	48.85536602
1697.63	37.39284776	10.89932214	25.25627104	47.93626353
1698.59	37.41078408	10.77819323	24.74408448	47.03094861
1699.56	37.43154776	10.65906701	24.24349294	46.14001925
1700.52	37.45499254	10.54268871	23.75164368	45.26404065
1701.48	37.48267761	10.42991871	23.26697254	44.40391726
1702.45	37.51389453	10.32135711	22.79131731	43.56054214
1703.41	37.55029502	10.21677229	22.32794219	42.73445109
1704.38	37.594301	10.11650408	21.87822129	41.92604463
1705.34	37.64530398	10.02137149	21.44076557	41.13593517
1706.31	37.70079552	9.931432537	21.01328	40.36481229
1707.27	37.75455423	9.846276965	20.5956193	39.61307896
1708.23	37.79813582	9.765397761	20.18960388	38.88073517
1709.2	37.83209055	9.687768806	19.79565562	38.16776701
1710.16	37.86508706	9.612673483	19.41302328	37.47433965
1711.13	37.89860547	9.541555124	19.04189045	36.80043517
1712.09	37.92948308	9.47502408	18.68102627	36.14565806
1713.06	37.96060348	9.410756617	18.32703622	35.50951527
1714.02	37.99538109	9.347836269	17.97820587	34.89169886
1714.98	38.03243085	9.288506866	17.63744567	34.29192721
1715.95	38.07224577	9.234018458	17.30725313	33.70971378
1716.91	38.11377015	9.182603234	16.98778995	33.14445209
1717.88	38.15784577	9.132548109	16.67784617	32.5955909
1718.84	38.20870945	9.084069552	16.37510318	32.06263617
1719.81	38.26669055	9.037043781	16.07961672	31.54507348
1720.77	38.32941443	8.991127761	15.79307881	31.04251328
1721.73	38.39612289	8.946608657	15.5169909	30.55467348
1722.7	38.46558408	8.902513433	15.25033816	30.08126353
1723.66	38.53786517	8.857406766	14.99191761	29.6220705
1724.63	38.61723682	8.810827065	14.74428502	29.17701378
1725.59	38.70600945	8.763187264	14.50994473	28.74596254
1726.55	38.80024975	8.715919701	14.28944343	28.32857348
1727.52	38.89519502	8.671110149	14.08122239	27.92438741
1728.48	38.98867164	8.628984527	13.88347259	27.5331297

1729.45	39.07830448	8.588382239	13.69489114	27.15446104
1730.41	39.15961294	8.549021194	13.51535632	26.78780682
1731.38	39.22907761	8.510881244	13.34593512	26.43285955
1732.34	39.29050498	8.473801443	13.18688677	26.08984711
1733.3	39.34859552	8.438614279	13.03592393	25.75899985
1734.27	39.40116866	8.406022886	12.89158413	25.44033269
1735.23	39.44802438	8.375400697	12.75472458	25.1340894
1736.2	39.49277214	8.346326517	12.62552134	24.84092075
1737.16	39.53606716	8.318945721	12.50214587	24.56132771
1738.12	39.57939055	8.293311841	12.38405552	24.29526055
1739.09	39.6274005	8.269221144	12.27132905	24.042371
1740.05	39.67598607	8.245941343	12.16277876	23.8023899
1741.02	39.71741144	8.223859005	12.0570492	23.57518443
1741.98	39.755899	8.203635522	11.95273552	23.36074662
1742.95	39.79745522	8.184321642	11.85059856	23.15929985
1743.91	39.84422289	8.165103632	11.75379244	22.97116303
1744.88	39.89675473	8.145442338	11.66421085	22.79632124
1745.84	39.95132289	8.124228308	11.58151781	22.6342899
1746.8	40.00794378	8.100768756	11.50565811	22.48432522
1747.77	40.07125771	8.075174378	11.43671781	22.3456705
1748.73	40.13975274	8.049310846	11.37292378	22.21746751
1749.7	40.21036766	8.025169403	11.31255711	22.09846204
1750.66	40.28186716	8.002888756	11.25623622	21.98720433
1751.62	40.35332289	7.98133602	11.20418896	21.88249289
1752.59	40.42296667	7.959499851	11.15439542	21.78312572
1753.55	40.48991841	7.937638358	11.1038999	21.68781627
1754.52	40.55716169	7.916588557	11.04984468	21.59568542
1755.48	40.62911592	7.896813284	10.99111035	21.50616701
1756.44	40.70557065	7.877935174	10.92956657	21.41851975
1757.41	40.78211393	7.859105025	10.86808348	21.33201677
1758.37	40.85570945	7.839723532	10.80649592	21.24642473
1759.34	40.92559204	7.818642985	10.74304517	21.16162075
1760.3	40.99240199	7.794686517	10.67697552	21.07717796
1761.27	41.05758358	7.769570945	10.60983468	20.99267299
1762.23	41.12006965	7.745961542	10.54321532	20.90804512
1763.19	41.17474975	7.724125323	10.47684756	20.82358045
1764.16	41.22110597	7.703765174	10.41083771	20.73982075
1765.12	41.26665323	7.685501542	10.34602438	20.6576297
1766.09	41.31015124	7.66980403	10.28407891	20.57793716
1767.05	41.34435025	7.656855274	10.22586259	20.5013103
1768.02	41.36764478	7.646261244	10.17024652	20.42799985
1768.98	41.38204279	7.637776169	10.11652234	20.35830383
1769.94	41.39098806	7.631701045	10.06465572	20.292769
1770.91	41.39563333	7.628562736	10.01390095	20.23213716
1771.87	41.39085075	7.629559751	9.963283831	20.17697448
1772.84	41.37558955	7.633776667	9.913816915	20.1274705
1773.8	41.35472537	7.638956766	9.867818408	20.08386204

1774.77	41.33408308	7.644795572	9.825580398	20.04647249
1775.73	41.31626567	7.652899552	9.785616667	20.0149894
1776.69	41.30191841	7.663584129	9.746348657	19.98876254
1777.66	41.29125174	7.675037861	9.707551244	19.96756652
1778.62	41.28591045	7.685646318	9.671182736	19.95118891
1779.59	41.28744577	7.694627413	9.638011592	19.93910433
1780.55	41.29137114	7.702026418	9.605621144	19.93062174
1781.52	41.29425771	7.707347313	9.571891891	19.92497647
1782.48	41.29892189	7.70931398	9.537680348	19.92107647
1783.44	41.30830796	7.708381642	9.504641045	19.91768542
1784.41	41.32298408	7.70652592	9.473624627	19.91373716
1785.37	41.34282488	7.703646318	9.443324129	19.90837995
1786.34	41.3668209	7.698599552	9.411822139	19.90092721
1787.3	41.39245323	7.69201597	9.379137562	19.89094413
1788.27	41.41864925	7.685097065	9.345308706	19.87840831
1789.23	41.44696915	7.677525423	9.308776866	19.86346751
1790.19	41.4771204	7.669092537	9.267972388	19.8462098
1791.16	41.50761891	7.661149453	9.22299	19.82684313
1792.12	41.53721493	7.65494393	9.175400995	19.80587945
1793.09	41.56593682	7.650498458	9.126114478	19.78415557
1794.05	41.59419652	7.647595672	9.075191592	19.76256552
1795.02	41.61882289	7.645811592	9.023671542	19.74175109
1795.98	41.63838706	7.644119154	8.973799552	19.72215507
1796.94	41.65446219	7.64186592	8.925465124	19.70414164
1797.91	41.66588308	7.640258856	8.876794179	19.68781627
1798.87	41.66939701	7.640483134	8.828434328	19.67311527
1799.84	41.66484826	7.641855672	8.783426816	19.6603894
1800.8	41.65683483	7.643821741	8.744704627	19.6501307
1801.76	41.65158507	7.64720791	8.713531592	19.64228095
1802.73	41.64954726	7.65268597	8.688814179	19.63644065
1803.69	41.64608756	7.6600599	8.669258458	19.63207647
1804.66	41.64192488	7.668711343	8.654912189	19.62859189
1805.62	41.64151493	7.678680945	8.646718657	19.6255108
1806.59	41.6487194	7.690804428	8.645192289	19.62275806
1807.55	41.66543781	7.70538791	8.649518657	19.62058343
1808.51	41.69011592	7.721611343	8.658350995	19.61942672
1809.48	41.71993483	7.738381642	8.671987463	19.61990532
1810.44	41.75588856	7.754666866	8.691171294	19.62276502
1811.41	41.804301	7.769618955	8.71416209	19.628869
1812.37	41.86665323	7.784221741	8.737425572	19.63893965
1813.34	41.93580697	7.79988199	8.760050348	19.65346851
1814.3	42.00719005	7.815664627	8.783230149	19.67296652
1815.26	42.08185224	7.830105622	8.807668657	19.69807149
1816.23	42.16044428	7.842572139	8.833161244	19.72941876
1817.19	42.23897711	7.853034776	8.857852985	19.76744413
1818.16	42.3105592	7.861540846	8.87929592	19.81223368
1819.12	42.37539602	7.868008308	8.896323881	19.86355408

1820.09	42.43891343	7.872575075	8.907657612	19.92098642
1821.05	42.50302587	7.876128458	8.914381194	19.98395209
1822.01	42.5672393	7.879694726	8.921060299	20.05174512
1822.98	42.63350796	7.88303995	8.931516915	20.12336154
1823.94	42.70446716	7.885461692	8.946806915	20.19727597
1824.91	42.77775721	7.887682289	8.965900398	20.27179239
1825.87	42.8493398	7.890561592	8.987720995	20.34542945
1826.83	42.9179602	7.894004925	9.012214577	20.41680149
1827.8	42.98599701	7.898494776	9.037901144	20.4847102
1828.76	43.05699652	7.905216269	9.061880896	20.54847129
1829.73	43.12592488	7.91367806	9.082694627	20.60785005
1830.69	43.1849801	7.922792587	9.099936667	20.6627006
1831.66	43.23356119	7.93267408	9.113731144	20.71294706
1832.62	43.27494527	7.943337562	9.124189154	20.75855687
1833.58	43.31353682	7.95479995	9.130242736	20.79943627
1834.55	43.3524995	7.967498159	9.130846866	20.83556716
1835.51	43.38965871	7.981551443	9.126867463	20.86720498
1836.48	43.42283483	7.995033881	9.121029453	20.89496766
1837.44	43.45279801	8.005579254	9.115343383	20.91960199
1838.4	43.48096667	8.013523035	9.109155075	20.94187214
1839.37	43.50705174	8.019756567	9.101097662	20.96265423
1840.33	43.52808856	8.024758109	9.090472189	20.9829199
1841.3	43.54580746	8.028540945	9.078712239	21.00350199
1842.26	43.57070697	8.030117313	9.069580945	21.02503333
1843.23	43.60964677	8.029060348	9.065349502	21.04798408
1844.19	43.65967761	8.025219104	9.065659751	21.07250299
1845.15	43.71865373	8.018406567	9.07153791	21.09851393
1846.12	43.78661144	8.008683333	9.085533682	21.12593333
1847.08	43.85951493	7.996401841	9.10804393	21.15477264
1848.05	43.93075721	7.98176801	9.136942587	21.18513881
1849.01	43.99885025	7.96499408	9.170341393	21.21704677
1849.98	44.06542736	7.946806318	9.207309751	21.25025323
1850.94	44.13121791	7.928576716	9.246993085	21.28463483
1851.9	44.19622338	7.911379204	9.287064378	21.32041592
1852.87	44.25808905	7.895236318	9.324758856	21.3576806
1853.83	44.31378905	7.881507612	9.360327612	21.39604726
1854.8	44.36554328	7.87189209	9.39503194	21.43481592
1855.76	44.4195796	7.866004776	9.428509055	21.47315124
1856.73	44.4788194	7.862625224	9.45962597	21.51023433
1857.69	44.54166418	7.86024194	9.48703398	21.54535323
1858.65	44.60685622	7.858191692	9.5098401	21.57787612
1859.62	44.67396219	7.857292189	9.5279099	21.60707065
1860.58	44.74111194	7.858180249	9.540799303	21.63202438
1861.55	44.806299	7.860386716	9.547788308	21.6521194
1862.51	44.86778408	7.86271806	9.550046965	21.6672801
1863.47	44.92447612	7.864111592	9.550083035	21.67776418
1864.44	44.98046567	7.864202637	9.549656567	21.68372935

1865.4	45.03999453	7.864294179	9.54900393	21.68512886
1866.37	45.09804726	7.865702637	9.547123184	21.6820791
1867.33	45.14852537	7.867836965	9.543575274	21.67505572
1868.3	45.19165224	7.869523035	9.540089602	21.66487463
1869.26	45.22707463	7.870332488	9.538150746	21.65247512
1870.22	45.25293085	7.870804129	9.537040746	21.63880348
1871.19	45.26749055	7.871996667	9.53677597	21.62484876
1872.15	45.26978308	7.874464328	9.539325572	21.6114806
1873.12	45.26505771	7.877123532	9.545862886	21.59939602
1874.08	45.26071144	7.879159851	9.55554194	21.5894398
1875.05	45.26207313	7.881036965	9.565398955	21.582499
1876.01	45.26903781	7.882711095	9.575866119	21.57908756
1876.97	45.27462139	7.883611592	9.591617114	21.57934378
1877.94	45.27974279	7.883008607	9.612236517	21.58312189
1878.9	45.29222388	7.881044428	9.633343433	21.59023085
1879.87	45.3117607	7.879157861	9.652269602	21.60049303
1880.83	45.33375174	7.877997662	9.669311443	21.61339055
1881.8	45.35859353	7.876990697	9.686267711	21.62804726
1882.76	45.38881741	7.875348408	9.702179701	21.6435393
1883.72	45.42355871	7.872804627	9.715948905	21.65922736
1884.69	45.460399	7.869221542	9.729963682	21.67499353
1885.65	45.49843333	7.86454592	9.745091194	21.69088408
1886.62	45.53723234	7.860177761	9.758821592	21.70663383
1887.58	45.57951891	7.858566318	9.769745672	21.72151393
1888.55	45.62641642	7.861386716	9.778578358	21.73477512
1889.51	45.67374677	7.867220547	9.788126269	21.74595771
1890.47	45.71783682	7.875073831	9.799179005	21.75459851
1891.44	45.75415025	7.886285622	9.80878398	21.76002338
1892.4	45.78075075	7.901926468	9.814290448	21.76156915
1893.37	45.80081343	7.922549204	9.814952139	21.75901791
1894.33	45.81580995	7.947524527	9.813931741	21.75242388
1895.3	45.82527562	7.975129851	9.814074527	21.74159602
1896.26	45.8316796	8.003605871	9.813916318	21.72631244
1897.22	45.834101	8.032464328	9.810967562	21.70672687
1898.19	45.82892836	8.061721592	9.803984975	21.68328607
1899.15	45.81560299	8.090724826	9.794619801	21.65658557
1900.12	45.79653383	8.119157313	9.785296915	21.62721891
1901.08	45.77630299	8.147209403	9.775187463	21.595701
1902.05	45.75869154	8.175169701	9.763381493	21.56287562
1903.01	45.7435791	8.202783731	9.750998408	21.52979353
1903.97	45.7297005	8.228638756	9.73947801	21.49726169
1904.94	45.71917463	8.251502388	9.729123284	21.46599552
1905.9	45.71469552	8.272009552	9.719953134	21.43688308
1906.87	45.71419254	8.291895174	9.714650149	21.41090647
1907.83	45.71519751	8.310805721	9.714880995	21.38893134
1908.79	45.71889751	8.326639154	9.717971542	21.37130498
1909.76	45.7266796	8.339548905	9.72296209	21.35789502

1910.72	45.74062139	8.350974975	9.73297005	21.34845174
1911.69	45.75963284	8.361227363	9.750498905	21.34274279
1912.65	45.77967463	8.369826567	9.774533433	21.3403791
1913.62	45.79958706	8.377728259	9.799550746	21.34081244
1914.58	45.81787363	8.385293483	9.821037413	21.34352736
1915.54	45.83340796	8.391001841	9.840047711	21.34814179
1916.51	45.84867662	8.395256169	9.860953184	21.35435821
1917.47	45.86465423	8.399715423	9.887640896	21.3616403
1918.44	45.87795522	8.404681244	9.917612786	21.3692209
1919.4	45.88584279	8.409490597	9.944911791	21.37657015
1920.37	45.89064826	8.413843234	9.967117065	21.38353433
1921.33	45.89683881	8.418088905	9.98484607	21.39011692
1922.29	45.9088801	8.422996617	10.00035209	21.39624826
1923.26	45.93048756	8.428880697	10.0148002	21.40185821
1924.22	45.96468458	8.435165721	10.02641935	21.40714925
1925.19	46.00985522	8.441283831	10.03452632	21.41251493
1926.15	46.06069055	8.447032388	10.04021592	21.4180791
1927.12	46.1163005	8.452356915	10.04431015	21.42359652
1928.08	46.17909701	8.457463582	10.04726025	21.42864478
1929.04	46.24736418	8.462895473	10.04910821	21.43277512
1930.01	46.31735572	8.468664776	10.04976199	21.43547413
1930.97	46.38899254	8.474464726	10.04999811	21.43624776
1931.94	46.45995473	8.47983199	10.05126716	21.43462736
1932.9	46.52464428	8.484547214	10.05526299	21.43033383
1933.86	46.58506468	8.488476965	10.06350085	21.42325224
1934.83	46.64535373	8.490865373	10.07511597	21.41317512
1935.79	46.69832637	8.490438458	10.08862915	21.39980796
1936.76	46.73693134	8.486318756	10.10186463	21.38284378
1937.72	46.75813284	8.477571741	10.11224985	21.36198756
1938.68	46.76188905	8.464567861	10.12050458	21.33707363
1939.65	46.75329403	8.450126169	10.12919761	21.30822687
1940.61	46.73323134	8.436024826	10.1393603	21.27587861
1941.58	46.69895075	8.421682239	10.14908617	21.24060348
1942.54	46.65082537	8.406343682	10.15660408	21.20313483
1943.51	46.59120398	8.389458856	10.16327025	21.16444627
1944.47	46.52252289	8.371510199	10.16911154	21.12551791
1945.43	46.44897463	8.353585323	10.17243045	21.08714378
1946.4	46.37727512	8.335909353	10.1726797	21.05030796
1947.36	46.3108005	8.318528259	10.17119562	21.0161199
1948.33	46.24721095	8.30159005	10.17046179	20.98515274
1949.29	46.18733184	8.285642537	10.17131055	20.95748657
1950.26	46.13570398	8.27206199	10.17252299	20.93309154
1951.22	46.09494726	8.261888358	10.17399264	20.91187761
1952.18	46.06705075	8.255796418	10.1770608	20.89373731
1953.15	46.05192388	8.255043333	10.18174189	20.87858358
1954.11	46.04672139	8.260147264	10.18702746	20.8664199
1955.08	46.04937313	8.268326517	10.1926499	20.85721443

1956.04	46.06243234	8.276661294	10.19864836	20.85083483
1957.01	46.09004677	8.284788557	10.20495244	20.84699005
1957.97	46.12823731	8.292560647	10.21083045	20.84506667
1958.93	46.16825224	8.299131244	10.21618109	20.84407015
1959.9	46.21205224	8.304589453	10.21795821	20.84273682
1960.86	46.26292438	8.309200398	10.21456289	20.84001294
1961.83	46.31841493	8.313743184	10.21109955	20.83535075
1962.79	46.37552786	8.318982488	10.21198706	20.82852786
1963.76	46.43131592	8.323701393	10.21664746	20.81946368
1964.72	46.48404179	8.325761592	10.22242607	20.80813731
1965.68	46.5326592	8.324009353	10.22790458	20.79459204
1966.65	46.57626219	8.318938209	10.23319303	20.77886219
1967.61	46.61651045	8.311630249	10.23733652	20.76082687
1968.58	46.65605423	8.301939204	10.23997448	20.74037811
1969.54	46.6943005	8.289553134	10.24277871	20.71780597
1970.51	46.72868308	8.275706866	10.24839866	20.69340299
1971.47	46.7593607	8.261919303	10.2586495	20.66699204
1972.43	46.78964229	8.249844179	10.27205781	20.63849303
1973.4	46.82203881	8.240668557	10.28621801	20.60817662
1974.36	46.85781791	8.233498905	10.30163035	20.57651891
1975.33	46.89759055	8.228084478	10.3185198	20.54429751
1976.29	46.93817562	8.225558607	10.33462189	20.51278259
1977.26	46.9760597	8.22538	10.34784677	20.48348557
1978.22	47.01106269	8.226083483	10.35806617	20.45775871
1979.18	47.04282139	8.228137214	10.36645473	20.4366209
1980.15	47.07016716	8.232824279	10.37435423	20.42061443
1981.11	47.09632935	8.241151642	10.38291343	20.4097204
1982.08	47.12400249	8.253358607	10.39265672	20.40353632
1983.04	47.1496607	8.268700398	10.4033398	20.40180348
1984	47.17117413	8.286771095	10.41639204	20.40472985
1984.97	47.19083731	8.308307214	10.43406448	20.41256816
1985.93	47.21254428	8.33315005	10.45432264	20.42533483
1986.9	47.23882289	8.359586816	10.47359423	20.44296119
1987.86	47.26951443	8.385256269	10.49142905	20.46519254
1988.83	47.30406119	8.409637413	10.5080491	20.49135373
1989.79	47.34262687	8.434350746	10.52295841	20.52052139
1990.75	47.38478209	8.459592139	10.53731124	20.55192289
1991.72	47.42829204	8.484185721	10.55226975	20.58501095
1992.68	47.47455323	8.508654279	10.56809378	20.61936766
1993.65	47.52770348	8.534324726	10.58453363	20.65433383
1994.61	47.58748308	8.561580796	10.60011005	20.68901542
1995.58	47.6519209	8.589799254	10.61298109	20.72284229
1996.54	47.72099552	8.617349303	10.6242398	20.7554592
1997.5	47.79173532	8.642998209	10.63564527	20.786601
1998.47	47.86048259	8.66732801	10.64601294	20.8162403
1999.43	47.92571045	8.690908657	10.65325721	20.84442836
2000.4	47.98521542	8.713137164	10.65671592	20.87071443

2001.36	48.03783831	8.733096418	10.6588607	20.89416866
2002.33	48.08578657	8.751254677	10.66194428	20.91371493
2003.29	48.13048259	8.769393632	10.66506667	20.92845323
2004.25	48.17243731	8.788590149	10.66694577	20.93778109
2005.22	48.20688308	8.808407413	10.66838159	20.94127761
2006.18	48.23137612	8.827829303	10.67046915	20.93877065
2007.15	48.25246219	8.846947065	10.67293333	20.930201
2008.11	48.27222687	8.865826169	10.6752801	20.91547612
2009.07	48.29060547	8.883931791	10.67673313	20.89471791
2010.04	48.31093682	8.901280498	10.67886413	20.86831891
2011	48.33133383	8.918025224	10.68355761	20.83672587
2011.97	48.35001144	8.935267264	10.69089393	20.80052537
2012.93	48.36935274	8.953736269	10.70021015	20.76066169
2013.9	48.38949751	8.972629204	10.71144617	20.718499
2014.86	48.41089701	8.992208955	10.7229806	20.67573632
2015.82	48.43614975	9.01333796	10.73236488	20.63422189
2016.79	48.46282736	9.036425821	10.73810493	20.59555373
2017.75	48.48667662	9.061247214	10.74098124	20.56092438
2018.72	48.50827363	9.085996965	10.74308134	20.53124279
2019.68	48.52924378	9.109793682	10.74527925	20.50709851
2020.64	48.54845224	9.133071642	10.74622826	20.48892736
2021.61	48.5651209	9.155369502	10.74561348	20.47698607
2022.57	48.58262736	9.175878905	10.74611259	20.4710791
2023.54	48.60689502	9.194559453	10.75057582	20.47061493
2024.5	48.64076915	9.211444129	10.76006662	20.4749
2025.47	48.68353184	9.226407313	10.77305716	20.48320547
2026.43	48.73215224	9.238767264	10.78733244	20.49485174
2027.39	48.78181244	9.247286965	10.80244552	20.50895174
2028.36	48.82639403	9.25140592	10.81977632	20.52434428
2029.32	48.86552935	9.250904428	10.8388392	20.53982338
2030.29	48.90167214	9.245801642	10.85739642	20.55415622
2031.25	48.9348597	9.2362	10.87540816	20.56617264
2032.22	48.96565871	9.223732786	10.89483129	20.57489801
2033.18	48.99333234	9.21059204	10.91655866	20.57951891
2034.14	49.01513234	9.196158308	10.93813169	20.57922786
2035.11	49.03068458	9.17912796	10.95671831	20.57339154
2036.07	49.03818657	9.160186667	10.97195458	20.5618408
2037.04	49.03453532	9.140509851	10.98490866	20.54502736
2038	49.02078458	9.121000995	10.99502368	20.5238801
2038.97	48.99846816	9.101616418	11.00026692	20.49920597
2039.93	48.96949502	9.082025473	10.99949164	20.47132587
2040.89	48.93483085	9.061907015	10.99337726	20.44028806
2041.86	48.89358109	9.041216567	10.98289119	20.40626766
2042.82	48.84624826	9.02138403	10.96946055	20.36973831
2043.79	48.79540796	9.003274279	10.95396323	20.33139254
2044.75	48.74489751	8.986769751	10.93672204	20.29182388
2045.71	48.69851741	8.971910995	10.91977045	20.25136617

2046.68	48.65854229	8.958339005	10.90417303	20.2102
2047.64	48.62752786	8.944673781	10.8886899	20.16842935
2048.61	48.6049408	8.929707214	10.87298448	20.126299
2049.57	48.58258159	8.913409403	10.8576302	20.08422786
2050.54	48.55359254	8.896901891	10.84338567	20.04256716
2051.5	48.51804726	8.881726965	10.83061274	20.00161791
2052.47	48.47808408	8.867877562	10.81773005	19.96163383
2053.43	48.43460249	8.854209104	10.80368836	19.92278259
2054.39	48.38740697	8.84021592	10.79055448	19.88518507
2055.36	48.33598905	8.826936119	10.78019532	19.84886169
2056.32	48.28253134	8.815043234	10.77145199	19.81360746
2057.29	48.23014478	8.803366119	10.76267587	19.77904378
2058.25	48.17697313	8.791761144	10.75490716	19.74510348
2059.22	48.1214801	8.780456368	10.74998025	19.71219353
2060.18	48.06751493	8.768460697	10.74667672	19.6807398
2061.14	48.01936517	8.755660398	10.74245085	19.65075672
2062.11	47.97878109	8.743037114	10.73596144	19.62170647
2063.07	47.9460204	8.731633632	10.72669478	19.59288159
2064.04	47.91802189	8.721947065	10.71512244	19.5638
2065	47.89167015	8.713161493	10.70252915	19.5342607
2065.96	47.86781692	8.704962488	10.69050537	19.50416368
2066.93	47.84784527	8.698094826	10.67919383	19.47338806
2067.89	47.83034776	8.692174428	10.66801358	19.44178408
2068.86	47.81271144	8.686000796	10.65767179	19.40911493
2069.82	47.79707164	8.679731642	10.64714846	19.37507164
2070.78	47.78703532	8.674207264	10.63455388	19.33949254
2071.75	47.77701144	8.669976418	10.6217309	19.3025408
2072.71	47.75997313	8.667128657	10.61201448	19.26441891
2073.68	47.73776766	8.665370448	10.60690224	19.22525025
2074.64	47.7124398	8.664424179	10.60471716	19.1852602
2075.61	47.68301542	8.663606269	10.60255398	19.14482687
2076.57	47.65018955	8.662615224	10.60097637	19.104399
2077.53	47.61538408	8.661916716	10.60122512	19.0643
2078.5	47.57877214	8.662298308	10.60128881	19.02454428
2079.46	47.53937711	8.663851045	10.59983756	18.98503682
2080.43	47.49579602	8.665642587	10.59891169	18.94592139
2081.39	47.44676766	8.666798308	10.59869279	18.90763333
2082.36	47.39380945	8.666588856	10.59664652	18.87050448
2083.32	47.34128259	8.665387363	10.59086393	18.83452886
2084.28	47.29262438	8.664076418	10.58102761	18.79953781
2085.25	47.24978358	8.662761493	10.56791294	18.76541642
2086.21	47.21232836	8.66066796	10.55188841	18.73224279
2087.18	47.17779701	8.656468955	10.5336398	18.70015572
2088.14	47.1479204	8.650135124	10.51297925	18.66929104
2089.11	47.125101	8.643131144	10.4889591	18.63976816
2090.07	47.10569552	8.636337114	10.46168721	18.61157313
2091.03	47.08558905	8.629524677	10.43078542	18.58442139

2092	47.06589453	8.62307791	10.39573662	18.55768358
2092.96	47.05023284	8.617917214	10.35672652	18.53054279
2093.93	47.03901095	8.613916716	10.314859	18.50234328
2094.89	47.0300204	8.610480398	10.27331647	18.47267761
2095.86	47.02327214	8.607265473	10.23458348	18.44101194
2096.82	47.01863234	8.604466468	10.19824995	18.40678856
2097.78	47.01159701	8.602788358	10.16210189	18.36974527
2098.75	46.99781393	8.602251542	10.12563905	18.32987512
2099.71	46.97737313	8.6019799	10.09047995	18.28719254
2100.68	46.95171294	8.601459801	10.05563542	18.24148756
2101.64	46.92202587	8.601469701	10.01949677	18.19244129
2102.61	46.88993035	8.602474129	9.983776368	18.14025373
2103.57	46.85608806	8.603922388	9.949448856	18.08566468
2104.53	46.8194801	8.605703035	9.91391602	18.02947015
2105.5	46.77995075	8.608518109	9.876053234	17.97245572
2106.46	46.73875771	8.613497164	9.838000995	17.91554876
2107.43	46.69624876	8.620975373	9.80358393	17.85962886
2108.39	46.6538597	8.631190199	9.775497413	17.80538955
2109.36	46.61302836	8.644948209	9.752301741	17.75351443
2110.32	46.57405672	8.662292786	9.731057512	17.70473284
2111.28	46.53927214	8.682108706	9.708989005	17.6597592
2112.25	46.50884229	8.703099652	9.687237512	17.61909851
2113.21	46.48089104	8.724868706	9.67015194	17.58285572
2114.18	46.45532786	8.746941194	9.658148408	17.55078358
2115.14	46.43026269	8.768189353	9.649010348	17.52253682
2116.1	46.401701	8.788224279	9.640497562	17.49793134
2117.07	46.36732488	8.807359403	9.631810597	17.47680945
2118.03	46.32729254	8.82539393	9.625438905	17.4587408
2119	46.28422537	8.842185522	9.622145672	17.44308109
2119.96	46.23975423	8.857918458	9.619721642	17.42929652
2120.93	46.1923204	8.871169204	9.616989303	17.4169408
2121.89	46.14327562	8.879389055	9.613863731	17.40543781
2122.85	46.09835622	8.881831642	9.609584179	17.39394129
2123.82	46.05878607	8.879754279	9.602620945	17.38148358
2124.78	46.01961592	8.874383532	9.59213204	17.36746119
2125.75	45.97909502	8.866417164	9.578271194	17.35187512
2126.71	45.93777463	8.856431493	9.561209701	17.33473483
2127.68	45.89508358	8.84531393	9.540334478	17.31572438
2128.64	45.8523607	8.834143085	9.515847015	17.29453731
2129.6	45.81062587	8.823780746	9.487790348	17.27091144
2130.57	45.76957512	8.814490249	9.457492537	17.24447861
2131.53	45.73059204	8.80651408	9.426712886	17.21500299
2132.5	45.69389652	8.799961045	9.394563881	17.18256219
2133.46	45.65883234	8.79382005	9.360092189	17.14718751
2134.43	45.63018458	8.787062239	9.322537313	17.10858219
2135.39	45.61267861	8.780064975	9.283814378	17.06641154
2136.35	45.60434826	8.77311408	9.24720398	17.0205007

2137.32	45.60052587	8.766484627	9.211029751	16.97081781
2138.28	45.59807114	8.761384129	9.172525423	16.91762592
2139.25	45.5964801	8.759129453	9.131453383	16.86143517
2140.21	45.59764776	8.759256816	9.089506915	16.80259025
2141.17	45.60395672	8.759332935	9.048454577	16.74138791
2142.14	45.61562935	8.757982985	9.007400299	16.67843896
2143.1	45.62962438	8.754804726	8.965310945	16.61442383
2144.07	45.64237114	8.748686915	8.923546517	16.54969527
2145.03	45.65255224	8.738831443	8.883561493	16.48440682
2146	45.65936617	8.725055473	8.845981542	16.41877557
2146.96	45.65995174	8.707540299	8.810644229	16.35333348
2147.92	45.6528209	8.687279303	8.776682189	16.288909
2148.89	45.64118159	8.665267015	8.744110945	16.22626791
2149.85	45.62539055	8.641303831	8.713113483	16.16581025
2150.82	45.60216368	8.614503284	8.682047363	16.10777617
2151.78	45.57099701	8.584761144	8.649821741	16.05261393
2152.74	45.53188159	8.553165473	8.616882886	16.00093522
2153.71	45.48612687	8.520569552	8.586025274	15.95344174
2154.67	45.43910647	8.487790149	8.558036766	15.91071159
2155.64	45.39291343	8.455390249	8.528421493	15.87283348
2156.6	45.34803184	8.423203483	8.493951692	15.83941507
2157.57	45.3088801	8.39169592	8.45616806	15.80990313
2158.53	45.27585174	8.362163234	8.419324527	15.78380413
2159.49	45.24459801	8.335545075	8.386286915	15.76060264
2160.46	45.21475025	8.312782139	8.355419701	15.73978871
2161.42	45.18704677	8.294342587	8.324842239	15.72091358
2162.39	45.16014478	8.279410995	8.294694328	15.70352154
2163.35	45.13492338	8.266347662	8.265610697	15.68715239
2164.32	45.11249154	8.253757264	8.238099104	15.67135488
2165.28	45.09033582	8.242059403	8.211154677	15.65563846
2166.24	45.06452985	8.231850299	8.184899303	15.63929269
2167.21	45.03272488	8.221620348	8.159389801	15.6212902
2168.17	44.99680498	8.210259701	8.133053284	15.60068572
2169.14	44.96012239	8.198096567	8.106661244	15.57665338
2170.1	44.92436368	8.185870199	8.081747015	15.54829418
2171.07	44.89175572	8.17422393	8.058884279	15.5146494
2172.03	44.86345174	8.162861741	8.039125871	15.47487229
2172.99	44.83810348	8.151288607	8.022576667	15.4285305
2173.96	44.8145	8.139609005	8.007372139	15.37587179
2174.92	44.79135721	8.127804527	7.991751393	15.31769154
2175.89	44.76823682	8.115451791	7.97539209	15.25492642
2176.85	44.74560498	8.10350005	7.958133632	15.18836453
2177.82	44.72118259	8.093195075	7.938624925	15.11842353
2178.78	44.69035622	8.081771194	7.914117363	15.04535139
2179.74	44.64962786	8.06721199	7.885145771	14.96951806
2180.71	44.59739453	8.051547313	7.85485403	14.89120463
2181.67	44.53221891	8.037435871	7.823534776	14.81054045

2182.64	44.4544204	8.025498557	7.79026194	14.72790214
2183.6	44.37025323	8.014597562	7.754704179	14.64408174
2184.57	44.28568657	8.004561741	7.717845174	14.55992204
2185.53	44.20112935	7.997238856	7.681878955	14.47617279
2186.49	44.11595075	7.992624925	7.646986169	14.39339567
2187.46	44.0303597	7.988247313	7.611862886	14.31190015
2188.42	43.94441045	7.983092587	7.574808607	14.23208721
2189.39	43.85954129	7.977623433	7.535276318	14.15434741
2190.35	43.77449403	7.971513483	7.49121393	14.0788509
2191.31	43.69095672	7.965407015	7.4426201	14.00571408
2192.28	43.61417114	7.960714478	7.394753483	13.93488622
2193.24	43.54553035	7.957621443	7.349980498	13.86630761
2194.21	43.48457562	7.955676169	7.306056816	13.80021856
2195.17	43.43232537	7.95571796	7.260976716	13.73718522
2196.14	43.38987861	7.958261741	7.215196119	13.67799716
2197.1	43.35992587	7.962368209	7.169350299	13.62334692
2198.06	43.34170995	7.966861244	7.124881841	13.57356731
2199.03	43.33201592	7.971373134	7.084115423	13.52862453
2199.99	43.32758408	7.97760005	7.048389055	13.48820761
2200.96	43.325399	7.985779701	7.017945672	13.45191159
2201.92	43.32434925	7.993649751	6.991095672	13.41927129
2202.89	43.31985274	8.001870896	6.96690194	13.38949667
2203.85	43.30773383	8.012646269	6.944356766	13.36154493
2204.81	43.29275871	8.026286816	6.923014179	13.33456433
2205.78	43.28173184	8.041431294	6.904620647	13.30801159
2206.74	43.2771796	8.05728806	6.891430746	13.28146881
2207.71	43.27809104	8.074683582	6.885245124	13.25429667
2208.67	43.27980846	8.09391209	6.886671841	13.2255703
2209.64	43.2805199	8.112901642	6.894317214	13.19444642
2210.6	43.28281841	8.130393682	6.907111741	13.16059567
2211.56	43.28678955	8.147205423	6.922436517	13.12417527
2212.53	43.28990597	8.163238507	6.936818259	13.08545687
2213.49	43.28747065	8.176848756	6.948783085	13.04490811
2214.46	43.27919552	8.187796368	6.959524826	13.00319119
2215.42	43.26691741	8.197734478	6.970659403	12.96099915
2216.39	43.24771095	8.207120448	6.979724726	12.91904592
2217.35	43.22004378	8.215539453	6.982978955	12.87794841
2218.31	43.18763781	8.22356791	6.979324925	12.83822204
2219.28	43.15415522	8.230985622	6.970594776	12.8003305
2220.24	43.12124328	8.237417512	6.959982537	12.76459617
2221.21	43.08762786	8.243289851	6.95006393	12.73133448
2222.17	43.05357662	8.248917114	6.94107209	12.70078423
2223.13	43.02042239	8.255371542	6.932623483	12.67297826
2224.1	42.98845174	8.263539055	6.924173532	12.64781607
2225.06	42.95701791	8.273804677	6.912830846	12.62495935
2226.03	42.92558209	8.285530498	6.896241741	12.6039295
2226.99	42.8977204	8.297016965	6.874854677	12.58442453

2227.95	42.87935274	8.307415622	6.852179154	12.56622502
2228.92	42.87127363	8.317108308	6.831466667	12.54899269
2229.88	42.87035323	8.326867313	6.811585323	12.53230114
2230.85	42.87436667	8.336954627	6.790162289	12.51536831
2231.81	42.88176119	8.347374577	6.767639055	12.49717279
2232.78	42.89587363	8.357941343	6.744921393	12.47706134
2233.74	42.92068806	8.367983781	6.721765522	12.45474383
2234.7	42.95700995	8.376523731	6.697184478	12.43004318
2235.67	43.00376816	8.382867363	6.671825721	12.40294114
2236.63	43.05664876	8.387090945	6.648906766	12.37361418
2237.6	43.10976965	8.389725522	6.628662388	12.34215542
2238.56	43.15820498	8.390977413	6.608881045	12.30847502
2239.53	43.20050746	8.389951493	6.589317114	12.27243269
2240.49	43.23713085	8.386084826	6.570447562	12.23402259
2241.45	43.26760348	8.379601443	6.550813383	12.19353383
2242.42	43.29107313	8.370505622	6.530953184	12.15148701
2243.38	43.30845572	8.359222289	6.513220746	12.10843189
2244.35	43.32642935	8.346528159	6.497712289	12.06492289
2245.31	43.35115323	8.332532637	6.48443398	12.02144095
2246.28	43.37979602	8.317251045	6.473922836	11.97841776
2247.24	43.40771144	8.301124876	6.465902736	11.93639164
2248.2	43.43214925	8.284326915	6.459760547	11.89593915
2249.17	43.45388607	8.264846716	6.454696965	11.85768826
2250.13	43.47442836	8.240798308	6.450905025	11.82222239
2251.1	43.49274527	8.213323582	6.44909204	11.78980468
2252.06	43.50831393	8.183925473	6.446941144	11.76049547
2253.03	43.52007363	8.152993383	6.440912886	11.73417498
2253.99	43.52927214	8.120671692	6.432352886	11.71028776
2254.95	43.53980348	8.08726194	6.424907761	11.68819289
2255.92	43.55505075	8.052663831	6.420018209	11.66757219
2256.88	43.57604677	8.016772687	6.418801741	11.64821353
2257.85	43.60261741	7.979648557	6.422239403	11.62984274
2258.81	43.63451244	7.941050597	6.429528408	11.61195124
2259.78	43.66849204	7.900233881	6.43838806	11.59373363
2260.74	43.70037164	7.856936766	6.445032438	11.57415692
2261.7	43.72968756	7.812214179	6.448586816	11.55206751
2262.67	43.75709005	7.7678199	6.451173035	11.52649905
2263.63	43.77872289	7.725256219	6.451768358	11.4969508
2264.6	43.79109801	7.685626816	6.447976219	11.46321463
2265.56	43.796701	7.648750896	6.440370149	11.425079
2266.53	43.80031294	7.613828806	6.429114279	11.38235697
2267.49	43.80642488	7.580581741	6.412935075	11.3350295
2268.45	43.81524179	7.549177761	6.392550199	11.28317453
2269.42	43.82195373	7.520369005	6.369196468	11.22691726
2270.38	43.82226716	7.493820149	6.342648458	11.16648383
2271.35	43.81565423	7.468366617	6.312859154	11.10212308
2272.31	43.80729453	7.443419851	6.28061199	11.03412602

2273.27	43.80024378	7.419554975	6.246539751	10.96283547
2274.24	43.79378607	7.397585572	6.21046602	10.88863701
2275.2	43.78769652	7.376921294	6.173153035	10.81206408
2276.17	43.78087662	7.356787562	6.137134876	10.73363299
2277.13	43.77257114	7.337726119	6.1036699	10.65375915
2278.09	43.7619791	7.319972239	6.072493881	10.573169
2279.06	43.74918458	7.302290647	6.044193184	10.49291194
2280.02	43.73588308	7.283706368	6.018942687	10.41380532
2280.99	43.72190896	7.264214279	5.995403085	10.33623692
2281.95	43.70516716	7.243883433	5.972816816	10.26020438
2282.92	43.68416468	7.22285796	5.951340498	10.18569294
2283.88	43.66132786	7.202641294	5.931668657	10.112931
2284.84	43.63944726	7.184373582	5.914405274	10.042291
2285.81	43.6167209	7.168067512	5.899197711	9.97436
2286.77	43.58930647	7.154256169	5.886172836	9.909871592
2287.74	43.55769602	7.14330194	5.875103333	9.849278458
2288.7	43.52503284	7.133646617	5.863303781	9.792704428
2289.67	43.49357463	7.125045572	5.849133184	9.740311393
2290.63	43.46760348	7.12001607	5.834084577	9.692223433
2291.59	43.45049751	7.1197101	5.821355174	9.648255323
2292.56	43.44292687	7.123270299	5.812297512	9.607934478
2293.52	43.44273184	7.129504129	5.805092438	9.570619254
2294.49	43.4493791	7.138372239	5.799446269	9.535615473
2295.45	43.46598657	7.150146766	5.796677612	9.502285622
2296.42	43.49165323	7.16448209	5.795313035	9.470076318
2297.38	43.52329005	7.180939353	5.794118209	9.438439403
2298.34	43.55890299	7.199140896	5.795816368	9.406795473
2299.31	43.59660746	7.218603184	5.800703731	9.374644527
2300.27	43.63473035	7.238705473	5.805251741	9.34170796
2301.24	43.67298856	7.257677214	5.809011741	9.308002289
2302.2	43.71085622	7.273946517	5.813588109	9.273591692
2303.17	43.74590547	7.288084826	5.81832209	9.238284876
2304.13	43.77635473	7.300677164	5.822500647	9.201693433
2305.09	43.802299	7.311695224	5.826636219	9.16349597
2306.06	43.82490398	7.321681592	5.8305201	9.123787114
2307.02	43.84430348	7.331109851	5.832914229	9.08292592
2307.99	43.85726368	7.340168607	5.832856318	9.041259801
2308.95	43.86107662	7.349582935	5.830713582	8.99912204
2309.91	43.8550403	7.359642388	5.828105522	8.956781095
2310.88	43.84138756	7.369292289	5.825608408	8.914452537
2311.84	43.82291791	7.377953532	5.822077313	8.872412786
2312.81	43.8009393	7.386850945	5.817303483	8.830917612
2313.77	43.77680398	7.39652796	5.812027264	8.790067512
2314.74	43.75032189	7.406252537	5.80614204	8.749923483
2315.7	43.72234826	7.416572985	5.798747313	8.710651095
2316.66	43.69234876	7.428053134	5.789276617	8.672530697
2317.63	43.66201493	7.440864527	5.778821493	8.635826965

2318.59	43.63874378	7.4552201	5.768813532	8.600719055
2319.56	43.62774776	7.470874975	5.758609701	8.567359303
2320.52	43.62902139	7.487446915	5.748113532	8.535850746
2321.49	43.6373398	7.504651493	5.738443632	8.506380448
2322.45	43.64617463	7.52194597	5.728633234	8.479352637
2323.41	43.6556393	7.53892806	5.718861244	8.455092488
2324.38	43.67054876	7.555574328	5.711357711	8.433657662
2325.34	43.69240498	7.57295	5.706861144	8.414848557
2326.31	43.72149701	7.59218602	5.705061692	8.398191493
2327.27	43.76022338	7.612248856	5.705419751	8.383115821
2328.24	43.8066398	7.631687065	5.707903383	8.369350896
2329.2	43.85338657	7.649402786	5.712368458	8.356868806
2330.16	43.89770846	7.665485871	5.717627512	8.345427612
2331.13	43.94071592	7.680768507	5.723526766	8.334585721
2332.09	43.98294229	7.694390796	5.730983284	8.323830249
2333.06	44.02315274	7.70430398	5.740761294	8.312675821
2334.02	44.0578398	7.709169552	5.752722886	8.300738607
2334.99	44.08511393	7.709845821	5.764993085	8.287590647
2335.95	44.10497114	7.707402637	5.77611791	8.272764328
2336.91	44.11608706	7.701854478	5.787126567	8.256124229
2337.88	44.11855025	7.693699602	5.798562488	8.237973731
2338.84	44.11461294	7.683489005	5.809590597	8.218724677
2339.81	44.10550896	7.671317512	5.818083433	8.198597114
2340.77	44.09420697	7.657504726	5.82138393	8.177517811
2341.74	44.08328308	7.640847114	5.820817015	8.155402537
2342.7	44.06989602	7.620355373	5.818389801	8.132344428
2343.66	44.04868657	7.598025323	5.814626119	8.108494428
2344.63	44.01899652	7.57627398	5.810717114	8.083982438
2345.59	43.98610398	7.555871428	5.80848592	8.05878393
2346.56	43.95845075	7.536676294	5.80985	8.032590945
2347.52	43.93949353	7.518731318	5.814964428	8.005018557
2348.49	43.92468408	7.501940821	5.8235001	7.975829005
2349.45	43.91369353	7.485566592	5.83632801	7.94489
2350.41	43.9084806	7.468557239	5.852606617	7.912187612
2351.38	43.90358159	7.450031368	5.869747065	7.8777699
2352.34	43.89513532	7.429789677	5.885575124	7.841540547
2353.31	43.88904577	7.409507189	5.899379851	7.803367612
2354.27	43.88781045	7.389658134	5.91258393	7.763195174
2355.23	43.88901642	7.368751318	5.927229055	7.7209899
2356.2	43.89146567	7.346220473	5.943153532	7.676772189
2357.16	43.894099	7.32231709	5.958362289	7.630572935
2358.13	43.89682139	7.298573109	5.970322438	7.582533682
2359.09	43.89879701	7.275075945	5.977752935	7.532996716
2360.05	43.89777363	7.249819129	5.980878209	7.482493632
2361.02	43.89549751	7.222743955	5.97927806	7.431633383
2361.98	43.89401791	7.19447898	5.971611194	7.380794776
2362.95	43.89152438	7.16405301	5.956264776	7.330152438

2363.91	43.88616219	7.130213856	5.933651592	7.279857562
2364.88	43.87571791	7.092543607	5.906516667	7.230124627
2365.84	43.86135025	7.052929428	5.876063532	7.181071343
2366.8	43.84812239	7.014039826	5.842918955	7.132570532
2367.77	43.83909851	6.975829776	5.80867005	7.084298189
2368.73	43.83320746	6.937155597	5.774688557	7.035932388
2369.7	43.82692637	6.898218582	5.74151209	6.987307478
2370.66	43.81879154	6.85909291	5.709492488	6.93832065
2371.63	43.81016517	6.8185851	5.678963383	6.888905387
2372.59	43.80187214	6.778193905	5.650702438	6.838967198
2373.55	43.79374726	6.739985498	5.625002985	6.788491288
2374.52	43.78732736	6.703445697	5.6018601	6.737673178
2375.48	43.78445124	6.668222612	5.58254602	6.68695873
2376.45	43.78598507	6.634893607	5.568588806	6.636893556
2377.41	43.79008607	6.604015	5.560738706	6.587635497
2378.38	43.79447015	6.576029975	5.55803199	6.539193805
2379.34	43.80075323	6.550204453	5.557468259	6.491814949
2380.3	43.80993433	6.526195249	5.557116269	6.445780074
2381.27	43.81886318	6.505625746	5.5567	6.401340223
2382.23	43.8244194	6.488168284	5.557682338	6.358618233
2383.2	43.82470647	6.47228102	5.560967761	6.317708084
2384.16	43.82204925	6.458963657	5.565345224	6.278810173
2385.12	43.81955224	6.448633607	5.570789104	6.242001317
2386.09	43.8146592	6.439750323	5.576209303	6.2071648
2387.05	43.80248358	6.431790821	5.579950896	6.173934253
2388.02	43.7839806	6.425651766	5.583760647	6.14180679
2388.98	43.76488358	6.421359726	5.590632139	6.110224203
2389.95	43.74459552	6.418329876	5.600025672	6.078648531
2390.91	43.71711045	6.415921418	5.610260299	6.04667485
2391.88	43.68095622	6.41402291	5.621432637	6.01404087
2392.84	43.63937811	6.412711965	5.633937214	5.980572113
2393.8	43.59647114	6.410590572	5.647822438	5.946052561
2394.77	43.55171144	6.406751766	5.661744478	5.910382213
2395.73	43.50358657	6.403449776	5.675403682	5.873667487
2396.7	43.46045821	6.401447786	5.689359154	5.836185198
2397.66	43.42860398	6.398925398	5.70407806	5.798284601
2398.62	43.40459005	6.395020423	5.720054428	5.760185447
2399.59	43.38475373	6.389519179	5.735851393	5.721870621
2400.55	43.36627363	6.382488383	5.749196517	5.683148979
2401.52	43.34594925	6.374016891	5.75887	5.644132511
2402.48	43.32649154	6.363659328	5.763313731	5.605149626
2403.45	43.31023333	6.352887189	5.761250249	5.566237934
2404.41	43.29339154	6.343215796	5.753904975	5.527274352
2405.37	43.27205522	6.334276294	5.743906119	5.488399327
2406.34	43.24421393	6.32693107	5.731461144	5.450011516
2407.3	43.2118607	6.322878333	5.716976269	5.412335696
2408.27	43.17587612	6.32228704	5.703458706	5.37528878

2409.23	43.1341597	6.323743806	5.690249104	5.338687188
2410.2	43.0867005	6.32660903	5.67646	5.302418581
2411.16	43.03801443	6.331087587	5.664573532	5.266552959
2412.12	42.99038955	6.337050821	5.655910398	5.231244402
2413.09	42.94044826	6.345570423	5.649527662	5.196607437
2414.05	42.8885204	6.357132711	5.644392438	5.162625148
2415.02	42.83952189	6.371186443	5.64004796	5.129184452
2415.98	42.79583433	6.387412761	5.636712736	5.096254551
2416.95	42.75627463	6.404787388	5.634205323	5.063871019
2417.91	42.71925174	6.422216542	5.632050299	5.032112213
2418.87	42.68804975	6.439791318	5.631455124	5.001047039
2419.84	42.66562338	6.457477239	5.633956716	4.970661765
2420.8	42.6447393	6.473947289	5.640601343	4.940959327
2421.77	42.62081642	6.488119378	5.650765274	4.911999676
2422.73	42.5967607	6.49991694	5.661894428	4.883872661
2423.7	42.57530299	6.510035348	5.672390846	4.856725049
2424.66	42.56025771	6.519108184	5.682398557	4.830845248
2425.62	42.55577363	6.526708731	5.69318597	4.806482561
2426.59	42.55805373	6.533304254	5.706674677	4.783817188
2427.55	42.55825672	6.54011306	5.724710647	4.763223407
2428.52	42.55130697	6.548111368	5.746752239	4.745331317
2429.48	42.53732338	6.556915498	5.770085622	4.730565994
2430.44	42.5210607	6.563299129	5.792104328	4.718973208
2431.41	42.50635423	6.565734453	5.813689552	4.7106549
2432.37	42.4939597	6.564929876	5.836283035	4.705822113
2433.34	42.47994577	6.562113408	5.858561493	4.704509526
2434.3	42.46168458	6.558339378	5.879946816	4.706597636
2435.27	42.44176169	6.554091368	5.902039353	4.711904253
2436.23	42.42254527	6.550051866	5.9241599	4.720003556
2437.19	42.40671642	6.546520821	5.94416194	4.730238233
2438.16	42.38795522	6.543104104	5.961132587	4.741974203
2439.12	42.35879353	6.539293955	5.975632587	4.754739327
2440.09	42.32230995	6.53463092	5.989028905	4.768157089
2441.05	42.28286219	6.529296891	6.001455025	4.781771715
2442.01	42.24349602	6.524178532	6.011955622	4.795037586
2442.98	42.20276468	6.52012296	6.020964229	4.807413904
2443.94	42.15784776	6.517933806	6.028623831	4.818388283
2444.91	42.11404328	6.518793259	6.033680846	4.827485795
2445.87	42.07732687	6.523189129	6.036105522	4.834270322
2446.84	42.04988856	6.530735647	6.037288458	4.838329526
2447.8	42.03210249	6.540813408	6.038647562	4.839313208
2448.76	42.01995821	6.5527949	6.040780796	4.836995795
2449.73	42.00744129	6.566807985	6.042188259	4.831199178
2450.69	41.99244527	6.581495697	6.040725871	4.821703158
2451.66	41.97693284	6.594330224	6.035024229	4.808232014
2452.62	41.96387015	6.604178284	6.025598856	4.790630024
2453.59	41.95245025	6.611069129	6.01364602	4.769084501

2454.55	41.93688806	6.616532711	6.001568408	4.744146939
2455.51	41.91514975	6.620871219	5.990007114	4.716449427
2456.48	41.88899801	6.622373806	5.97694806	4.686505248
2457.44	41.8635806	6.618952463	5.96495408	4.654756293
2458.41	41.84281393	6.609284652	5.957044876	4.621571715
2459.37	41.82434129	6.59482709	5.952028358	4.587262909
2460.34	41.80595423	6.577524005	5.948270796	4.552212442
2461.3	41.78366219	6.557459677	5.94520194	4.516899208
2462.26	41.76009652	6.535101617	5.943781045	4.481979113
2463.23	41.74226119	6.511298433	5.945159701	4.448210904
2464.19	41.73070796	6.487006493	5.949224179	4.416136278
2465.16	41.72409801	6.463210721	5.95522393	4.386139113
2466.12	41.71959453	6.440639378	5.962938358	4.358602447
2467.09	41.71822687	6.419753159	5.971879602	4.333823392
2468.05	41.72359602	6.400586343	5.980890547	4.312069258
2469.01	41.73545323	6.382982861	5.989015771	4.293659681
2469.98	41.75242935	6.366484701	5.996715622	4.278848412
2470.94	41.7725204	6.350684353	6.004421095	4.267723521
2471.91	41.79382189	6.336539726	6.010982985	4.260140885
2472.87	41.8163398	6.324364552	6.016812935	4.255532875
2473.84	41.84045224	6.312985348	6.023738607	4.253267253
2474.8	41.86294577	6.302829129	6.0315299	4.253004069
2475.76	41.87903085	6.294445398	6.039385522	4.254842875
2476.73	41.88487662	6.286370124	6.046992587	4.25910377
2477.69	41.87970746	6.276530323	6.053648159	4.265923671
2478.66	41.86785224	6.263862612	6.060245075	4.275154516
2479.62	41.8521791	6.248324104	6.067538557	4.286332974
2480.58	41.83297015	6.229635348	6.074837164	4.298775959
2481.55	41.80903682	6.208487537	6.081179801	4.311882825
2482.51	41.77942836	6.186677736	6.08823194	4.325240238
2483.48	41.74456368	6.163619428	6.097588856	4.338329243
2484.44	41.7042602	6.137191915	6.109327413	4.35047183
2485.41	41.66196667	6.107598881	6.122488408	4.361181183
2486.37	41.62157761	6.076209826	6.135773831	4.370256258
2487.33	41.58259652	6.044327587	6.149784179	4.377669989
2488.3	41.54384577	6.012888184	6.164126667	4.383495213
2489.26	41.50545124	5.982479428	6.177296468	4.387843074
2490.23	41.46931244	5.953788632	6.189575274	4.390722278
2491.19	41.43499154	5.927319328	6.200679353	4.392240686
2492.16	41.40210896	5.902728433	6.207963184	4.392837054
2493.12	41.37341095	5.879203657	6.21194403	4.392839691
2494.08	41.35217562	5.85662296	6.215909353	4.392100437
2495.05	41.34008408	5.836492711	6.220160448	4.390258646
2496.01	41.33602637	5.819346692	6.224537761	4.387064019
2496.98	41.33671294	5.805728582	6.228211443	4.38267989
2497.94	41.33690995	5.796718333	6.22877592	4.377680387
2498.91	41.3339204	5.791419925	6.225881891	4.372820288

2499.87	41.32959552	5.78912908	6.220576965	4.368640885
2500.83	41.32675323	5.790005995	6.212747811	4.365363472
2501.8	41.32736418	5.793219428	6.202998408	4.363138397
2502.76	41.33315473	5.797847836	6.192706617	4.362250785
2503.73	41.34475771	5.803645846	6.184093333	4.36307586
2504.69	41.35912935	5.811365597	6.17890005	4.365827949
2505.66	41.37284876	5.821629925	6.177093532	4.370565661
2506.62	41.38793433	5.833624602	6.178380697	4.377271084
2507.58	41.41002935	5.847645498	6.182389104	4.385952626
2508.55	41.44265423	5.865606791	6.187717264	4.396806009
2509.51	41.48154826	5.887748134	6.193265423	4.410161482
2510.48	41.51915075	5.912748532	6.200081144	4.426282875
2511.44	41.55138657	5.939138881	6.210231642	4.445102526
2512.4	41.57790746	5.96586495	6.225051741	4.466268646
2513.37	41.59830299	5.992245945	6.245509104	4.489307004
2514.33	41.61031542	6.017128184	6.268953831	4.513917054
2515.3	41.61593433	6.039126095	6.291994925	4.539904268
2516.26	41.62534478	6.057175697	6.316384876	4.566623621
2517.22	41.64188159	6.071384453	6.343756866	4.593162377
2518.19	41.65939204	6.083269428	6.371645622	4.618873322
2519.15	41.67481542	6.094230323	6.399710398	4.643417253
2520.12	41.68766915	6.104160274	6.428168308	4.66666785
2521.08	41.69593284	6.111840473	6.456094378	4.68867989
2522.05	41.69950647	6.11660291	6.483559652	4.709415312
2523.01	41.70409652	6.119600821	6.510863284	4.72863581
2523.97	41.71160249	6.121108632	6.53745592	4.746304666
2524.94	41.72100448	6.120493209	6.563712488	4.762843223
2525.9	41.73360995	6.119219478	6.591296617	4.779022427
2526.87	41.74819552	6.119409627	6.620113532	4.79547173
2527.83	41.76368109	6.122999328	6.647645672	4.812564467
2528.8	41.78045572	6.131381468	6.673087015	4.830920039
2529.76	41.80026169	6.144519328	6.697902537	4.851195959
2530.72	41.82487711	6.162602164	6.72132602	4.873672725
2531.69	41.85418706	6.185678333	6.741876418	4.898548347
2532.65	41.88461045	6.212833607	6.760517413	4.926044865
2533.62	41.90790498	6.24271107	6.781697065	4.956250934
2534.58	41.91971443	6.274735	6.810112985	4.988953969
2535.55	41.92326119	6.310227637	6.844290697	5.023685113
2536.51	41.92122338	6.349444005	6.880157313	5.059996407
2537.47	41.91607214	6.390330572	6.913878159	5.097484765
2538.44	41.91391493	6.431532164	6.943401592	5.135679392
2539.4	41.91810149	6.472035065	6.969140746	5.17401974
2540.37	41.91892488	6.510750498	6.991510597	5.212068546
2541.33	41.90928159	6.546765871	7.012409005	5.249520487
2542.3	41.89461642	6.579410995	7.033946269	5.285852626
2543.26	41.87871144	6.607594478	7.054654876	5.320509541
2544.22	41.86281045	6.631379055	7.07481	5.353155213

2545.19	41.85020299	6.652138308	7.096526965	5.383604765
2546.15	41.84093532	6.670103085	7.119743134	5.411913223
2547.12	41.83094925	6.68341005	7.143942687	5.438441432
2548.08	41.82045871	6.69127597	7.169856418	5.463811084
2549.05	41.81051244	6.694632537	7.196577612	5.48871581
2550.01	41.79949851	6.694272289	7.223555323	5.513784616
2550.97	41.78665622	6.691925174	7.253506119	5.539698298
2551.94	41.77282488	6.6879399	7.28683398	5.567137004
2552.9	41.76141343	6.681835025	7.321663632	5.596406805
2553.87	41.75610746	6.675422388	7.356388259	5.627564715
2554.83	41.7553199	6.670044776	7.39297204	5.66082785
2555.8	41.75286119	6.665827164	7.435984378	5.696305362
2556.76	41.74552736	6.663842736	7.486589502	5.733869541
2557.72	41.738001	6.665721841	7.542072637	5.773330387
2558.69	41.73511493	6.671239403	7.598491194	5.814609989
2559.65	41.73504478	6.678101144	7.653620149	5.857755462
2560.62	41.73473532	6.684833731	7.706369154	5.902715079
2561.58	41.73516318	6.691893333	7.756133532	5.949472148
2562.54	41.73694179	6.699066368	7.803767612	5.997936108
2563.51	41.73922687	6.705800896	7.850267065	6.047700273
2564.47	41.74447612	6.712003134	7.896155572	6.098067897
2565.44	41.756601	6.71742602	7.941060547	6.148110721
2566.4	41.77730149	6.721808458	7.985988259	6.19724896
2567.36	41.80591393	6.725224776	8.032467761	6.245089995
2568.33	41.83875821	6.727531692	8.07797403	6.291143129
2569.29	41.869601	6.727145672	8.120337711	6.334944095
2570.26	41.89395522	6.722251045	8.159851343	6.376136134
2571.22	41.90747463	6.712207562	8.196167662	6.414751856
2572.19	41.90863333	6.697293085	8.22869806	6.45106897
2573.15	41.90214279	6.678684328	8.259533483	6.485323348
2574.11	41.88945174	6.656131443	8.290960348	6.517658522
2575.08	41.87127363	6.628479701	8.320844677	6.547963498
2576.04	41.84998308	6.597670846	8.345935025	6.57591101
2577.01	41.82549552	6.566433682	8.366963333	6.601302303
2577.97	41.79701891	6.534982587	8.388940995	6.624158274
2578.94	41.76424527	6.502809851	8.412103035	6.644528721
2579.9	41.72937413	6.470341841	8.432767512	6.662685139
2580.86	41.69741443	6.437838607	8.452882786	6.679297179
2581.83	41.67083881	6.404765871	8.473883333	6.695122204
2582.79	41.64707512	6.37160607	8.492908657	6.710666682
2583.76	41.6259597	6.339009552	8.508177811	6.72624907
2584.72	41.61134229	6.307338507	8.52035806	6.742211557
2585.69	41.6029597	6.276882985	8.530091095	6.758705985
2586.65	41.59706169	6.247962985	8.537401144	6.775625687
2587.61	41.5918592	6.220747562	8.542462836	6.792890612
2588.58	41.59046368	6.195415721	8.546610398	6.810438473
2589.54	41.59555124	6.17236199	8.551220697	6.828166682

2590.51	41.6018393	6.151515423	8.555264179	6.84587907
2591.47	41.60452438	6.132541493	8.556999851	6.863543945
2592.44	41.60284627	6.114905771	8.555979353	6.881341308
2593.4	41.59657214	6.098883582	8.551888259	6.899548373
2594.36	41.58481642	6.085029552	8.546642786	6.918534343
2595.33	41.56938458	6.073358756	8.54318602	6.938467975
2596.29	41.55363831	6.0635301	8.543506418	6.959298323
2597.26	41.53341891	6.05360398	8.548980448	6.981019269
2598.22	41.50542338	6.042888557	8.55745209	7.003540264
2599.18	41.47452388	6.033486816	8.565385274	7.02665703
2600.15	41.44559303	6.025469353	8.57488801	7.050324343
2601.11	41.42087662	6.016776617	8.589797264	7.074527527
2602.08	41.40234428	6.005986866	8.607419303	7.099166682
2603.04	41.39331542	5.993544328	8.626766716	7.124252552
2604.01	41.39534527	5.981030796	8.651160796	7.149842552
2604.97	41.40386269	5.969317363	8.678738507	7.175886284
2605.93	41.41314129	5.958032488	8.705731294	7.202296333
2606.9	41.42417612	5.94578	8.733279005	7.229195985
2607.86	41.43726517	5.932790746	8.764498109	7.257096682
2608.83	41.4470607	5.920704478	8.800059701	7.286558771
2609.79	41.45246816	5.910296716	8.838253433	7.317892154
2610.76	41.45929353	5.902211144	8.878109602	7.351363249
2611.72	41.47057662	5.897749204	8.919289453	7.387110114
2612.68	41.48216816	5.897636269	8.960310796	7.425110114
2613.65	41.49003333	5.90185204	8.99946398	7.465429716
2614.61	41.4986592	5.911490995	9.0361701	7.508079418
2615.58	41.51043085	5.927729652	9.07090607	7.552824642
2616.54	41.52002687	5.949796716	9.104582687	7.599408871
2617.51	41.52188607	5.975900249	9.140511542	7.647692303
2618.47	41.51477512	6.00510199	9.18016801	7.697595985
2619.43	41.50021791	6.03764393	9.218973433	7.749147726
2620.4	41.47758458	6.073297065	9.252134279	7.802387726
2621.36	41.45060796	6.111640448	9.279595473	7.85700897
2622.33	41.42663085	6.152628358	9.30371	7.912290761
2623.29	41.40788358	6.195226368	9.327087114	7.967479517
2624.26	41.39466915	6.238991294	9.350075224	8.021781358
2625.22	41.39002488	6.284047264	9.370504826	8.07434698
2626.18	41.39778308	6.330707214	9.390377662	8.124656682
2627.15	41.41661592	6.378840697	9.412410249	8.172741955
2628.11	41.44223134	6.427510199	9.435231692	8.219075388
2629.08	41.47375572	6.475233035	9.45725995	8.264292851
2630.04	41.51183184	6.520967861	9.479840348	8.309108522
2631.01	41.55319104	6.564943483	9.504255871	8.354421507
2631.97	41.59767612	6.607503085	9.530396915	8.400998025
2632.93	41.64939851	6.648442587	9.557201393	8.449158124
2633.9	41.70703085	6.688159502	9.583255622	8.499083448
2634.86	41.76578259	6.72741801	9.608833582	8.550837229

2635.83	41.82618557	6.766085224	9.636174726	8.604353697
2636.79	41.89010547	6.804427662	9.668079353	8.659604891
2637.75	41.95737861	6.843126269	9.706779303	8.716658075
2638.72	42.02464627	6.881281343	9.752196318	8.775783746
2639.68	42.08998308	6.917324378	9.803061542	8.837447726
2640.65	42.15474776	6.951282388	9.859660647	8.902164244
2641.61	42.21558657	6.984280697	9.920218458	8.970367279
2642.58	42.26906169	7.017151045	9.980954478	9.042297478
2643.54	42.31553184	7.050727015	10.04260229	9.117949617
2644.5	42.35705622	7.085376219	10.10889711	9.197011756
2645.47	42.39399303	7.121185224	10.17932507	9.279018373
2646.43	42.42594975	7.15846	10.25054144	9.363551657
2647.4	42.45855771	7.19745204	10.32223254	9.450045139
2648.36	42.50043881	7.237344279	10.39693582	9.53785494
2649.32	42.55162786	7.277632338	10.47642408	9.626719468
2650.29	42.6050403	7.318009104	10.55860816	9.716702751
2651.25	42.65512935	7.358232935	10.63857965	9.807754692
2652.22	42.7026209	7.397486716	10.71521632	9.899679418
2653.18	42.75076517	7.43456995	10.7903992	9.992279567
2654.15	42.80066866	7.469201045	10.86440219	10.08548392
2655.11	42.85135323	7.501316468	10.93631572	10.17895645
2656.07	42.89770896	7.530082488	11.00409164	10.27191162
2657.04	42.93755821	7.554898507	11.06644582	10.36356147
2658	42.97498756	7.575815871	11.12469751	10.45316655
2658.97	43.01311791	7.592647313	11.1804408	10.54009411
2659.93	43.04851642	7.605986269	11.2337004	10.62392237
2660.9	43.07778159	7.616444478	11.28381398	10.70441336
2661.86	43.10230348	7.623300448	11.33224542	10.781458
2662.82	43.12332736	7.626532388	11.38040333	10.85493553
2663.79	43.13738557	7.627858806	11.42555597	10.92467939
2664.75	43.1391796	7.628245522	11.46563438	10.99063433
2665.72	43.12951542	7.627064229	11.50206144	11.05279169
2666.68	43.11548259	7.625825274	11.53549662	11.1111906
2667.65	43.0970408	7.62522597	11.56372358	11.16587527
2668.61	43.07331493	7.623792886	11.58547821	11.21674915
2669.57	43.05164328	7.621261592	11.60357463	11.26344985
2670.54	43.03919552	7.619358856	11.62124642	11.30544816
2671.5	43.03735871	7.620236965	11.63964189	11.34243995
2672.47	43.03945672	7.624095124	11.65846841	11.37451826
2673.43	43.04096716	7.62964209	11.67773587	11.40199269
2674.39	43.0430194	7.635038806	11.69682667	11.42530627
2675.36	43.04679751	7.638556517	11.71711502	11.44507512
2676.32	43.05254478	7.640360647	11.73890726	11.46190269
2677.29	43.06027164	7.642230199	11.76028279	11.47632015
2678.25	43.06598308	7.644336368	11.77901104	11.4887098
2679.22	43.06576816	7.645433831	11.79220348	11.499579
2680.18	43.06089154	7.644385522	11.80000537	11.50945343

2681.14	43.05451144	7.640552189	11.80360701	11.51846781
2682.11	43.05008259	7.634386269	11.8037891	11.5267996
2683.07	43.04373632	7.626178806	11.80237289	11.53487905
2684.04	43.03163284	7.614883085	11.80219189	11.54311378
2685	43.0150806	7.599597861	11.80600219	11.55179453
2685.97	42.99378358	7.581138955	11.8130005	11.56105726
2686.93	42.96693632	7.560886119	11.82039781	11.57096308
2687.89	42.93563582	7.538582189	11.82768771	11.58173662
2688.86	42.90210597	7.513891045	11.8349593	11.5935895
2689.82	42.86928806	7.488463234	11.84072149	11.60664239
2690.79	42.83678209	7.460890995	11.84466622	11.62082353
2691.75	42.80857861	7.42970592	11.85021657	11.63556
2692.72	42.78692637	7.397673234	11.86027687	11.64998592
2693.68	42.76537811	7.367088259	11.87310512	11.66340761
2694.64	42.7396796	7.337712289	11.88741627	11.67532154
2695.61	42.7082791	7.309694229	11.90512861	11.68521687
2696.57	42.67163383	7.28365408	11.92717582	11.6925006
2697.54	42.63195274	7.258275274	11.95046617	11.6967094
2698.5	42.59077363	7.233541642	11.97311119	11.69767925
2699.47	42.54950398	7.21116204	11.99486254	11.69524806
2700.43	42.50528358	7.191276119	12.01422284	11.68916786
2701.39	42.4504408	7.172099204	12.02940328	11.67917697
2702.36	42.38379602	7.152724328	12.04122249	11.66504333
2703.32	42.30938905	7.133591891	12.05305418	11.64625861
2704.29	42.23156318	7.115767114	12.0654104	11.62216811
2705.25	42.15316418	7.100091393	12.07545308	11.59274851
2706.22	42.07119254	7.085288159	12.08217234	11.55836493
2707.18	41.98570746	7.069926318	12.08600547	11.51920194
2708.14	41.90102736	7.054021741	12.08872856	11.4754492
2709.11	41.81915721	7.03850204	12.09112647	11.42747299
2710.07	41.73531095	7.026274179	12.09062005	11.37589214
2711.04	41.64911741	7.017062587	12.08561756	11.32171517
2712	41.56555323	7.008017711	12.07716458	11.26617622
2712.97	41.48569502	6.997145373	12.06446542	11.21055653
2713.93	41.40981045	6.983379502	12.04710468	11.15599853
2714.89	41.33677711	6.968478408	12.02689184	11.10337066
2715.86	41.262801	6.954727313	12.00501746	11.05358627
2716.82	41.18847562	6.942276269	11.98181692	11.00762826
2717.79	41.12054279	6.93101398	11.95762065	10.96611329
2718.75	41.05981443	6.921304328	11.93477144	10.92918926
2719.71	41.00178507	6.911223582	11.91399771	10.89692617
2720.68	40.94744129	6.899095572	11.89389637	10.86962946
2721.64	40.89933532	6.886266716	11.87531279	10.84762234
2722.61	40.85608408	6.873586418	11.85896935	10.83070702
2723.57	40.81406119	6.860287463	11.84428677	10.81843797
2724.53	40.7722607	6.846336219	11.83162682	10.81041478
2725.5	40.73129502	6.832893682	11.82218527	10.80610692

2726.46	40.69221891	6.820651542	11.81480572	10.80480025
2727.43	40.6604204	6.809954229	11.80597428	10.80572991
2728.39	40.63854577	6.801013333	11.79388637	10.80826418
2729.36	40.62329751	6.792492836	11.78109259	10.81163309
2730.32	40.61193881	6.783526119	11.77080254	10.81483438
2731.28	40.60479303	6.774814577	11.76650229	10.81703239
2732.25	40.59771095	6.767419055	11.76961269	10.81765384
2733.21	40.58417463	6.762977463	11.77862537	10.81638747
2734.18	40.56854279	6.759947662	11.79204473	10.81321767
2735.14	40.55260149	6.756890846	11.80643746	10.80825762
2736.11	40.5295597	6.754496318	11.81839353	10.80177294
2737.07	40.49780995	6.753961144	11.83025219	10.794081
2738.03	40.45923831	6.755619701	11.84476473	10.78535359
2739	40.41682985	6.758449453	11.86008622	10.7755513
2739.96	40.37663582	6.761835025	11.87430547	10.76433219
2740.93	40.33956866	6.766009254	11.88686746	10.75118473
2741.89	40.30183333	6.769976418	11.89815751	10.73578647
2742.86	40.26464478	6.773737562	11.90859134	10.71823583
2743.82	40.23281443	6.779987015	11.91601672	10.69873473
2744.78	40.20694627	6.788342338	11.91737194	10.67745697
2745.75	40.18221642	6.796413333	11.91261274	10.65457876
2746.71	40.15574378	6.80373806	11.90317891	10.63049065
2747.68	40.12758507	6.810075821	11.88982866	10.60571443
2748.64	40.09974677	6.815454677	11.87177965	10.58046299
2749.61	40.07674328	6.821112189	11.84657478	10.55476224
2750.57	40.06105721	6.827844328	11.81501657	10.52856707
2751.53	40.05029502	6.834930945	11.78302398	10.50176468
2752.5	40.0418403	6.841851095	11.75432483	10.47418578
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2755.39	40.01967711	6.861685174	11.68395124	10.38663742
2756.36	40.00197861	6.868668308	11.66392478	10.35630961
2757.32	39.98167164	6.877550348	11.64408095	10.32595538
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2759.25	39.9377801	6.90285199	11.60552677	10.26775602
2760.21	39.91642985	6.917508806	11.58803831	10.24130662
2761.18	39.8978393	6.932181393	11.57076119	10.2170218
2762.14	39.88428756	6.945994378	11.5549597	10.19481637
2763.11	39.87909254	6.959467612	11.54236343	10.17466498
2764.07	39.8811597	6.973176965	11.53226866	10.15681821
2765.03	39.89511095	6.98602	11.52484935	10.14158801
2766	39.92281741	6.997758458	11.52085234	10.12905105
2766.96	39.95641294	7.008815672	11.51868468	10.11918518
2767.93	39.99084776	7.018515174	11.51702796	10.11215627
2768.89	40.02293483	7.026984726	11.51752149	10.10809224
2769.85	40.05318308	7.034427463	11.5211006	10.10707707
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2772.75	40.15338408	7.043422985	11.5412193	10.12038911
2773.71	40.18499453	7.041045721	11.55424552	10.12856672
2774.68	40.21419055	7.035208408	11.56983478	10.13770513
2775.64	40.23678856	7.027015373	11.58453871	10.14710025
2776.6	40.24630697	7.016992537	11.5970603	10.15615593
2777.57	40.24307114	7.005544776	11.6077394	10.16443498
2778.53	40.2306199	6.99301801	11.61775592	10.17163145
2779.5	40.21272488	6.979388905	11.62750308	10.17782851
2780.46	40.19318159	6.96552592	11.63672403	10.18334762
2781.43	40.17294527	6.951933085	11.64377388	10.18824359
2782.39	40.14975174	6.938313881	11.64570751	10.1924401
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2784.32	40.09547015	6.908158706	11.63993627	10.19789085
2785.28	40.06547164	6.890223582	11.63648035	10.19826458
2786.25	40.03496418	6.87088204	11.63172284	10.19651961
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2788.18	39.98245672	6.82793204	11.62373463	10.18602861
2789.14	39.96028109	6.805038259	11.61762144	10.17719269
2790.1	39.93353831	6.782542239	11.60652851	10.16612518
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2792.03	39.88380448	6.739552537	11.56689806	10.13739428
2793	39.86724129	6.71709592	11.54328104	10.11984438
2793.96	39.8561393	6.692634826	11.52050308	10.10022428
2794.93	39.85169254	6.66671607	11.49707756	10.07834573
2795.89	39.84726368	6.639459453	11.47194109	10.05423657
2796.85	39.83830149	6.610680149	11.44476313	10.02796115
2797.82	39.82624428	6.579925443	11.413641	9.999323935
2798.78	39.81192488	6.547327458	11.38220035	9.968162045
2799.75	39.79891244	6.513511527	11.35422667	9.934751149
2800.71	39.79135124	6.478922881	11.32709119	9.899662095
2801.67	39.78620846	6.442858577	11.29760254	9.863432841
2802.64	39.78203234	6.404166979	11.26462587	9.826383139
2803.6	39.77791443	6.363481199	11.22828423	9.788583736
2804.57	39.76925224	6.322260368	11.18907413	9.749879159
2805.53	39.75651542	6.280824856	11.14899159	9.710417766
2806.49	39.74429254	6.2375759	11.1118803	9.670631149
2807.46	39.73182935	6.192472219	11.07912642	9.630678065
2808.42	39.71497164	6.147355552	11.049011	9.590714483
2809.39	39.6954204	6.103037592	11.02172423	9.551333139
2810.35	39.67652438	6.060464259	10.9986192	9.513340453
2811.32	39.65932338	6.020001423	10.97700527	9.477321896
2812.28	39.64682687	5.981332567	10.95463612	9.443659657
2813.24	39.64234378	5.944005204	10.93370627	9.412550751
2814.21	39.64585373	5.907509632	10.91699134	9.384139507
2815.17	39.65170498	5.871954657	10.90352617	9.358829557
2816.14	39.65297761	5.836803562	10.89192368	9.337061896

2817.1	39.65138308	5.801256	10.88141274	9.318930055
2818.07	39.64654577	5.766114358	10.87137045	9.304387269
2819.03	39.63327562	5.73265998	10.86251672	9.293418114
2819.99	39.60945672	5.699651323	10.85454507	9.285780801
2820.96	39.58004876	5.665715701	10.84682567	9.281012144
2821.92	39.55366866	5.631792318	10.84109582	9.278642493
2822.89	39.52841095	5.599115254	10.83741771	9.278349458
2823.85	39.49619652	5.567866398	10.8322391	9.279704184
2824.82	39.45393085	5.536779333	10.8239605	9.281881299
2825.78	39.4031806	5.50496993	10.81365154	9.28384697
2826.74	39.34420597	5.473294756	10.80262468	9.284923587
2827.71	39.27941244	5.442508587	10.7927804	9.284747965
2828.67	39.21452687	5.412336995	10.78498338	9.283152443
2829.64	39.14984378	5.382629433	10.77769483	9.279793239
2830.6	39.08596119	5.354997194	10.76794557	9.273991746
2831.57	39.0262194	5.330811771	10.75322667	9.265451448
2832.53	38.97041095	5.30870988	10.73487144	9.254101199
2833.49	38.91709851	5.28811202	10.7156993	9.23955891
2834.46	38.86651194	5.268732567	10.69627194	9.221436522
2835.42	38.82056866	5.250157592	10.6765605	9.199807169
2836.39	38.77889751	5.232115751	10.65706448	9.175028065
2837.35	38.73834328	5.213823214	10.63490776	9.147506174
2838.32	38.69875771	5.196249482	10.60555154	9.117789756
2839.28	38.66373234	5.18104804	10.56951771	9.08652906
2840.24	38.63509254	5.168545602	10.53173811	9.054298214
2841.21	38.60932687	5.159735154	10.49429582	9.021768363
2842.17	38.58224577	5.154770975	10.45565005	8.989767368
2843.14	38.55480945	5.151321224	10.4134605	8.958964383
2844.1	38.53275423	5.149134657	10.36901025	8.929919109
2845.07	38.51870199	5.149694358	10.32556896	8.903301697
2846.03	38.50513532	5.153644756	10.28351274	8.879817119
2846.99	38.48803284	5.161058686	10.24214109	8.86005692
2847.96	38.46988507	5.172343811	10.20396199	8.844486274
2848.92	38.45359552	5.18718804	10.17132368	8.833841995
2849.89	38.4420801	5.204879582	10.14479483	8.829114134
2850.85	38.43372189	5.224982965	10.1244794	8.830864881
2851.81	38.42621791	5.247128786	10.10904159	8.839216124
2852.78	38.41976119	5.271635204	10.09755701	8.854070353
2853.74	38.41966567	5.298332766	10.0910003	8.875271348
2854.71	38.42729005	5.325720179	10.0914993	8.902776821
2855.67	38.43743134	5.352589731	10.10028836	8.936161398
2856.64	38.45059353	5.378957343	10.11740527	8.974687269
2857.6	38.47223134	5.404264955	10.14348736	9.017887269
2858.56	38.50737413	5.428270925	10.17621771	9.065418114
2859.53	38.5557403	5.450726647	10.21233711	9.116780303
2860.49	38.61039652	5.470850229	10.24919134	9.171396224
2861.46	38.66879204	5.490676249	10.287159	9.228757418

2862.42	38.73545423	5.511814657	10.32998438	9.28845493
2863.39	38.80877214	5.533157492	10.37831697	9.350075826
2864.35	38.88332985	5.553380975	10.42851418	9.413186274
2865.31	38.95796567	5.570862517	10.47842328	9.477332045
2866.28	39.03668856	5.58556401	10.52720134	9.542059905
2867.24	39.11977264	5.599691174	10.57563955	9.607106672
2868.21	39.2047199	5.615763463	10.62484682	9.672321597
2869.17	39.29491841	5.634345403	10.67295532	9.737580303
2870.14	39.39321493	5.655178288	10.71946199	9.802997716
2871.1	39.49780249	5.677109433	10.76533861	9.868891249
2872.06	39.61048259	5.698087393	10.81058378	9.935651945
2873.03	39.73269801	5.718280378	10.85618095	10.00317682
2873.99	39.85958706	5.739350079	10.90124	10.07104717
2874.96	39.98861393	5.76180202	10.9445295	10.13913528
2875.92	40.11811443	5.784416398	10.98672945	10.2073706
2876.88	40.25132537	5.805584209	11.02781204	10.27548458
2877.85	40.38979303	5.825614507	11.06555095	10.34322175
2878.81	40.5330995	5.845231871	11.09767831	10.41028886
2879.78	40.6839403	5.863910975	11.12486517	10.47642294
2880.74	40.83978408	5.881037343	11.14841866	10.54157488
2881.71	40.99275025	5.897128885	11.16835373	10.60570204
2882.67	41.13472886	5.912304657	11.18712692	10.66876826
2883.63	41.26138209	5.926599681	11.20588811	10.73069175
2884.6	41.37681045	5.941416199	11.22515577	10.79126523
2885.56	41.48249353	5.956333363	11.24588473	10.85038389
2886.53	41.57530348	5.969354955	11.26751856	10.90797324
2887.49	41.65545423	5.979191473	11.29131607	10.96389951
2888.45	41.72425622	5.986308637	11.31956085	11.01814906
2889.42	41.78329801	5.991768836	11.35096532	11.07083399
2890.38	41.83255174	5.995993164	11.38268075	11.12212538
2891.35	41.87284776	5.999736846	11.41426632	11.1721016
2892.31	41.90807861	6.001894806	11.44548274	11.22083856
2893.28	41.93904179	6.000797293	11.47590363	11.26855986
2894.24	41.96772886	5.996560925	11.50702055	11.31551588
2895.2	41.99987612	5.990722517	11.5412907	11.361942
2896.17	42.03330498	5.984428139	11.57596383	11.40793045
2897.13	42.06521891	5.977381771	11.60681935	11.45377687
2898.1	42.09852886	5.967814706	11.63421572	11.50000468
2899.06	42.13402587	5.953851274	11.65852169	11.54695911
2900.03	42.17352537	5.936077691	11.67874244	11.59495214
2900.99	42.21695821	5.916607393	11.69512498	11.64458428
2901.95	42.26701095	5.896259831	11.70790468	11.69641264
2902.92	42.32627065	5.874887691	11.71802124	11.75069782
2903.88	42.39114527	5.850852866	11.72895249	11.80761598
2904.85	42.45905622	5.825560079	11.74275294	11.86717602
2905.81	42.5293199	5.802079134	11.75912647	11.92913737
2906.78	42.59875075	5.780142219	11.77546343	11.99286153

2907.74	42.6651005	5.758691821	11.79084905	12.05740809
2908.7	42.7292597	5.737091075	11.80700219	12.12188621
2909.67	42.79529751	5.715970776	11.82544224	12.18545518
2910.63	42.86213483	5.69620003	11.8461791	12.24740264
2911.6	42.92314478	5.677948985	11.86881667	12.30712816
2912.56	42.97968557	5.660737393	11.89122408	12.36399214
2913.53	43.03455473	5.644993164	11.91138836	12.41717612
2914.49	43.08303284	5.630510328	11.92925637	12.46587617
2915.45	43.12439502	5.616367094	11.94533398	12.50956871
2916.42	43.16208955	5.603306249	11.95993562	12.54802552
2917.38	43.1967	5.595249482	11.97286249	12.58124318
2918.35	43.22561144	5.592313065	11.98414284	12.60929209
2919.31	43.24642736	5.590019383	11.99326348	12.63213423
2920.28	43.26015821	5.585367045	12.00210075	12.64993711
2921.24	43.26804925	5.577280428	12.01264761	12.66329403
2922.2	43.26929104	5.565757791	12.02396388	12.67310796
2923.17	43.26631841	5.552213214	12.03507607	12.68052577
2924.13	43.26419104	5.538599681	12.04584124	12.68675816
2925.1	43.26348109	5.525141075	12.05610667	12.69293816
2926.06	43.26369104	5.511039482	12.06604	12.70005075
2927.02	43.26611493	5.495540627	12.07568179	12.70892856
2927.99	43.26993184	5.480790477	12.08236438	12.72017796
2928.95	43.27494826	5.467742169	12.0852196	12.73414647
2929.92	43.28372537	5.454953512	12.08551164	12.75094756
2930.88	43.29658806	5.443006199	12.08466239	12.77079721
2931.85	43.31176418	5.432809681	12.08305592	12.79424403
2932.81	43.32811542	5.424720079	12.08150269	12.82192592
2933.77	43.3446	5.418882667	12.0811395	12.85441517
2934.74	43.36345025	5.4145659	12.08207184	12.89200388
2935.7	43.38879851	5.412776	12.08277134	12.93462184
2936.67	43.41471493	5.414627691	12.08135343	12.98186756
2937.63	43.433499	5.418826696	12.07905393	13.03338025
2938.59	43.44881144	5.426663114	12.07764448	13.08886846
2939.56	43.46640448	5.440646696	12.07692209	13.14800791
2940.52	43.48677512	5.460611721	12.07701861	13.21039403
2941.49	43.50945124	5.481925602	12.08060169	13.2753199
2942.45	43.53316567	5.500914358	12.09022682	13.34209184
2943.42	43.55565672	5.517363811	12.10693269	13.41069746
2944.38	43.5783194	5.532085453	12.13006204	13.48145189
2945.34	43.59983035	5.546512766	12.15701184	13.55437935
2946.31	43.61695771	5.562237741	12.18728264	13.62914592
2947.27	43.62956368	5.579852119	12.22100194	13.70535886
2948.24	43.63906269	5.598540477	12.25782	13.78280303
2949.2	43.64952537	5.617729681	12.29713532	13.8610904
2950.17	43.66020199	5.637144308	12.33688219	13.93951871
2951.13	43.66617612	5.656114806	12.37557925	14.01723612
2952.09	43.66733134	5.673936945	12.4145009	14.09338721

2953.06	43.66213731	5.691639433	12.45409463	14.16716532
2954.02	43.64564378	5.710078438	12.49249204	14.23795647
2954.99	43.61867861	5.728254159	12.52841393	14.30531398
2955.95	43.58455174	5.745511871	12.56216119	14.36877343
2956.92	43.5484592	5.762336099	12.59390473	14.42803333
2957.88	43.51496368	5.779444955	12.62249254	14.48297861
2958.84	43.47756468	5.798852318	12.64621781	14.53364269
2959.81	43.42980597	5.821574657	12.66468547	14.57999925
2960.77	43.38093333	5.845456597	12.6783591	14.6220309
2961.74	43.3401806	5.870496348	12.68661035	14.66009831
2962.7	43.30823532	5.897782169	12.68971134	14.69491662
2963.66	43.28323085	5.925491771	12.69040736	14.72717791
2964.63	43.26408358	5.951922567	12.69087701	14.75749642
2965.59	43.24797264	5.977119084	12.69097701	14.786981
2966.56	43.23555522	6.002171423	12.69049294	14.81700139
2967.52	43.22950796	6.028943264	12.68978498	14.84816806
2968.49	43.22896567	6.058120378	12.68938498	14.88053025
2969.45	43.23505771	6.088880677	12.69041682	14.91432413
2970.41	43.24954577	6.119805353	12.69267353	14.9501608
2971.38	43.26805323	6.150302866	12.6988009	14.98853721
2972.34	43.28423383	6.180352766	12.70960239	15.02924547
2973.31	43.29661144	6.209903711	12.72075463	15.07146955
2974.27	43.30728159	6.239269134	12.73040786	15.11423881
2975.24	43.31909154	6.268523662	12.74068124	15.15681786
2976.2	43.3337005	6.295745701	12.755899	15.1985294
2977.16	43.3480005	6.320480229	12.7748406	15.23884199
2978.13	43.35822537	6.343496995	12.79475199	15.27754254
2979.09	43.36445672	6.365011473	12.81666517	15.31463239
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2981.02	43.35443682	6.405875701	12.86455284	15.38503617
2981.99	43.33105622	6.426201473	12.88832677	15.41837925
2982.95	43.29843483	6.445861025	12.9132095	15.4498
2983.91	43.26413831	6.463231323	12.93916239	15.47902303
2984.88	43.22487164	6.478695801	12.96628428	15.50627846
2985.84	43.17395522	6.493177443	12.99581672	15.53159423
2986.81	43.11391194	6.505915303	13.02819443	15.5546197
2987.77	43.04632488	6.516667343	13.06008876	15.57493428
2988.74	42.9713806	6.526638786	13.0884496	15.59231502
2989.7	42.89489751	6.537646398	13.11389502	15.60633582
2990.66	42.81875075	6.550244806	13.13689388	15.61643841
2991.63	42.74186169	6.563879463	13.15642498	15.62261294
2992.59	42.66515572	6.577287647	13.16951771	15.6251797
2993.56	42.58557861	6.590795866	13.17626294	15.62420383
2994.52	42.50126965	6.605287497	13.17961831	15.61924299
2995.49	42.41757711	6.620765234	13.17640428	15.60947363
2996.45	42.33957612	6.637770365	13.16484448	15.59424736
2997.41	42.26884975	6.6561049	13.14824194	15.57352333

2998.38	42.20718905	6.672852945	13.129651	15.54765378
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3001.27	42.03204726	6.710548209	13.06181766	15.44296322
3002.24	41.97460199	6.719116368	13.03687174	15.40147887
3003.2	41.9198607	6.72377791	13.01177776	15.35791232
3004.16	41.8639199	6.723803582	12.98493433	15.31255106
3005.13	41.8062592	6.719641642	12.95673194	15.2653883
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3010.91	41.3310801	6.638212239	12.79689104	14.94232037
3011.88	41.24153731	6.619672139	12.77203388	14.87909581
3012.84	41.14905075	6.600956517	12.74821791	14.8124743
3013.8	41.05301095	6.581627612	12.72407821	14.74256983
3014.77	40.95132139	6.562818756	12.69768502	14.66948958
3015.73	40.84149453	6.544020647	12.66803851	14.59295953
3016.7	40.72217463	6.5254101	12.63679025	14.51249505
3017.66	40.59822886	6.507699204	12.60456249	14.42780415
3018.63	40.47574876	6.491215025	12.56894109	14.33887211
3019.59	40.35805821	6.475884726	12.52997781	14.24605659
3020.55	40.24515771	6.460762687	12.48836075	14.14979291
3021.52	40.13470896	6.444903483	12.44425577	14.05023092
3022.48	40.02208159	6.428171194	12.39951537	13.94770505
3023.45	39.90836965	6.410845075	12.35560517	13.84313172
3024.41	39.79708607	6.391105274	12.3132299	13.73774729
3025.38	39.68678358	6.366492637	12.27178204	13.63237082
3026.34	39.57606418	6.338533433	12.22974597	13.52755311
3027.3	39.46223234	6.30965398	12.18601388	13.42387241
3028.27	39.34443234	6.281670796	12.14081542	13.32171963
3029.23	39.22614925	6.253748806	12.09484279	13.22131405
3030.2	39.11221542	6.223599801	12.0492601	13.12285634
3031.16	39.00259851	6.191046766	12.00606124	13.02646609
3032.13	38.894199	6.1568299	11.96651826	12.9321457
3033.09	38.78975572	6.122182637	11.93152547	12.83956087
3034.05	38.68879303	6.087831791	11.90063303	12.7481743
3035.02	38.58756169	6.052672687	11.87185438	12.65768659
3035.98	38.48581841	6.015528458	11.84185025	12.56778376
3036.95	38.38347562	5.979131741	11.81151657	12.4779856
3037.91	38.27671642	5.945110896	11.78187836	12.38765983
3038.88	38.16367363	5.911563632	11.75045896	12.29604341
3039.84	38.05129453	5.878342985	11.71456174	12.20231744
3040.8	37.94445721	5.846301791	11.67306517	12.10566002
3041.77	37.8414791	5.813900199	11.6260593	12.00505838
3042.73	37.7369408	5.780553134	11.57429562	11.89941789

3043.7	37.6266403	5.747717413	11.51881985	11.78775803
3044.66	37.51399602	5.716571642	11.4598393	11.66950251
3045.62	37.400701	5.686997114	11.3992703	11.54482336
3046.59	37.28629552	5.658481294	11.33872119	11.41411231
3047.55	37.16844826	5.629139453	11.27801104	11.27767187
3048.52	37.04377612	5.598679353	11.21498254	11.13578903
3049.48	36.91417562	5.570023532	11.14735408	10.9891755
3050.45	36.78079104	5.544227363	11.07472373	10.83871769
3051.41	36.64173731	5.51988796	10.99771502	10.68507634
3052.38	36.49564726	5.49491801	10.91893637	10.52898679
3053.34	36.34280498	5.469926667	10.84169557	10.3713554
3054.3	36.18553881	5.446111791	10.76820199	10.21319779
3055.27	36.03041144	5.422904328	10.69897219	10.05553734
3056.23	35.87560746	5.400722488	10.63363642	9.899307438
3057.2	35.71529701	5.379702289	10.56923507	9.74558102
3058.16	35.5479199	5.359240249	10.50312483	9.59568704
3059.12	35.3731791	5.33913393	10.43711761	9.450879776
3060.09	35.19158955	5.320110697	10.37344303	9.312235746
3061.05	35.00562985	5.301494975	10.30782473	9.180486443
3062.02	34.81884925	5.281922438	10.23807129	9.05575999
3062.98	34.63234925	5.262337562	10.16744796	8.937527493
3063.95	34.44471891	5.243374428	10.10030552	8.824965453
3064.91	34.25396368	5.225274776	10.03808159	8.717383512
3065.87	34.05623532	5.209837811	9.979121642	8.614472368
3066.84	33.85383582	5.197375174	9.922627512	8.516106846
3067.8	33.65228159	5.186856119	9.870069104	8.421945154
3068.77	33.44895771	5.177384279	9.824109602	8.331507841
3069.73	33.23964279	5.168579652	9.785734527	8.244233761
3070.7	33.02145025	5.161041244	9.751285323	8.159541373
3071.66	32.79352786	5.155934876	9.716339303	8.07679008
3072.62	32.55925124	5.153398905	9.679135473	7.995268736
3073.59	32.32079005	5.15312791	9.641197811	7.913857841
3074.55	32.07986816	5.154707363	9.604632338	7.831218935
3075.52	31.84127761	5.157343134	9.570233682	7.74624396
3076.48	31.61114129	5.161501642	9.535804428	7.658028189
3077.45	31.39276766	5.167120249	9.499646915	7.565983711
3078.41	31.18412736	5.173127562	9.459988259	7.46992991
3079.37	30.98121592	5.179762139	9.415423632	7.369939234
3080.34	30.78671592	5.186232189	9.365399453	7.266361323
3081.3	30.6020607	5.192266667	9.309129602	7.159847194
3082.27	30.42598209	5.198000796	9.246066866	7.051081522
3083.23	30.26029602	5.203246915	9.174291095	6.940673313
3084.19	30.10676468	5.207622537	9.095139652	6.829082269
3085.16	29.96559303	5.211258159	9.01388209	6.716588836
3086.12	29.8371393	5.215753035	8.93466592	6.603550627
3087.09	29.72188308	5.221671244	8.859924279	6.490805005
3088.05	29.61630448	5.228440597	8.788419851	6.379629035

3089.02	29.51390846	5.235325572	8.718108905	6.271163264
3089.98	29.41843682	5.241691791	8.652426318	6.166217393
3090.94	29.33282736	5.248422189	8.595051343	6.065517642
3091.91	29.25009154	5.257753333	8.546749403	5.969847791
3092.87	29.16723134	5.27007791	8.507657214	5.87993391
3093.84	29.08558159	5.284685224	8.474663383	5.796097443
3094.8	29.00814428	5.300540199	8.444501443	5.71824794
3095.76	28.93087313	5.317326866	8.417303433	5.646128114
3096.73	28.84647861	5.335502736	8.394943035	5.579225323
3097.69	28.75634129	5.354678706	8.378030995	5.516872338
3098.66	28.66222438	5.373861642	8.364748259	5.4584101
3099.62	28.56381841	5.393000796	8.352459254	5.403181741
3100.59	28.46418159	5.412712687	8.33980801	5.350715622
3101.55	28.36403284	5.432754527	8.325311493	5.300809801
3102.51	28.2617408	5.453149204	8.309116219	5.253250995
3103.48	28.15155672	5.472668806	8.289949701	5.207539055
3104.44	28.02734826	5.489958955	8.264836716	5.162971791
3105.41	27.8916796	5.503900547	8.234246169	5.118800348
3106.37	27.74735274	5.514338458	8.200485124	5.074385124
3107.34	27.59591095	5.522317711	8.165839303	5.029205224
3108.3	27.44455274	5.529504179	8.131956617	4.982650199
3109.26	27.29598557	5.53594	8.099282587	4.934104428
3110.23	27.14724975	5.539651294	8.067476219	4.883114428
3111.19	26.99795771	5.537371244	8.0364801	4.829112075
3112.16	26.85111045	5.528935622	8.00543408	4.771507249
3113.12	26.71214577	5.518039104	7.97487	4.710361179
3114.09	26.57977612	5.508578308	7.946557463	4.646186751
3115.05	26.45085721	5.501675622	7.920264677	4.579299289
3116.01	26.32767363	5.495407264	7.89538199	4.509871826
3116.98	26.2093403	5.488763134	7.870901642	4.4380369
3117.94	26.09345473	5.481500448	7.844161692	4.364057945
3118.91	25.9784602	5.473817015	7.813407164	4.288326502
3119.87	25.86438458	5.466555771	7.780616368	4.211099687
3120.84	25.75646269	5.459448856	7.746167363	4.132507697
3121.8	25.65858308	5.452445025	7.710070149	4.052750532
3122.76	25.57134279	5.446518856	7.673877363	3.972149289
3123.73	25.49314279	5.442068507	7.636615274	3.891141279
3124.69	25.42032935	5.437822786	7.595949055	3.810129736
3125.66	25.35011095	5.433105473	7.551767662	3.729272721
3126.62	25.27980796	5.427593881	7.504464279	3.648399637
3127.59	25.20941294	5.421268905	7.455626766	3.567308393
3128.55	25.13977512	5.414554129	7.407052139	3.485928891
3129.51	25.06649104	5.407956368	7.35933209	3.40420695
3130.48	24.99037313	5.401542338	7.313294826	3.322031527
3131.44	24.91976517	5.394458756	7.268587512	3.238923965
3132.41	24.85284428	5.385266915	7.225519005	3.154178204
3133.37	24.78275124	5.372912687	7.18628995	3.067091662

3134.33	24.7073791	5.356405025	7.151040846	2.977138527
3135.3	24.6242408	5.339036816	7.117286219	2.884458328
3136.26	24.53102388	5.324936866	7.084846667	2.789695493
3137.23	24.42637512	5.314295473	7.055322786	2.69310206
3138.19	24.30877264	5.304486567	7.025582537	2.594610617
3139.16	24.17991891	5.293126318	6.991259502	2.494529522
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3141.08	23.9103199	5.262411244	6.905545274	2.292899562
3142.05	23.77641194	5.244300896	6.855971791	2.192922672
3143.01	23.64202587	5.225365323	6.804317363	2.09410402
3143.98	23.50895373	5.205168458	6.751127612	1.996950945
3144.94	23.38049701	5.184382736	6.698265124	1.902198348
3145.91	23.2547199	5.164123781	6.646599801	1.810737751
3146.87	23.13341692	5.144215522	6.594511791	1.723513871
3147.83	23.0242806	5.124088408	6.54209209	1.641282478
3148.8	22.92725672	5.104327761	6.492537114	1.564759095
3149.76	22.8385194	5.085500547	6.446792338	1.494502925
3150.73	22.75896567	5.068150199	6.403920398	1.430657104
3151.69	22.68823731	5.052683831	6.364678507	1.372945811
3152.66	22.6253597	5.039435075	6.3308101	1.320760239
3153.62	22.57565373	5.028479005	6.304573134	1.273502378
3154.58	22.5354199	5.018603632	6.285853035	1.230110786
3155.55	22.49461095	5.008895871	6.274880697	1.189056209
3156.51	22.45565473	5.000270348	6.272744378	1.148993522
3157.48	22.42271343	4.992946318	6.276554328	1.108959741
3158.44	22.39283831	4.988144876	6.283722488	1.068066756
3159.41	22.36188308	4.986359602	6.293169254	1.025186657
3160.37	22.33001194	4.986230547	6.300181692	0.979198846
3161.33	22.29847114	4.985985025	6.299481692	0.929562527
3162.3	22.26430697	4.984706269	6.293284677	0.876147552
3163.26	22.22823383	4.982946368	6.285211841	0.8188579
3164.23	22.19315721	4.982056617	6.274866915	0.757365313
3165.19	22.16017264	4.981709403	6.257891045	0.691132527
3166.15	22.12602189	4.981660448	6.23274995	0.619996905
3167.12	22.08649701	4.983167512	6.2037299	0.54450004
3168.08	22.04055821	4.985777861	6.174814478	0.465721881
3169.05	21.98461393	4.988501741	6.145522189	0.384871935
3170.01	21.91617711	4.992077363	6.111671891	0.303146657
3170.97	21.84122338	4.996431692	6.073891692	0.221716433
3171.94	21.76081841	5.001430647	6.035028706	0.141905607
3172.9	21.67520647	5.008069303	5.994906617	0.064879209
3173.87	21.59038607	5.017080896	5.953089453	-0.008585284
3174.83	21.5076597	5.027531493	5.911454826	-0.077929353
3175.8	21.42635522	5.038628806	5.871595174	-0.142635891
3176.76	21.34863682	5.049622537	5.835242587	-0.201931905
3177.72	21.27339055	5.060226169	5.803056766	-0.255534861
3178.69	21.20793035	5.072501493	5.775836965	-0.303399438

3179.65	21.15929204	5.087869104	5.753324627	-0.344944463
3180.62	21.1245204	5.104754826	5.733233284	-0.379477547
3181.58	21.10146766	5.122186418	5.717227015	-0.406490035
3182.55	21.08944876	5.139997811	5.707349701	-0.42566909
3183.51	21.09093831	5.15785408	5.702140796	-0.436785557
3184.47	21.106601	5.17580602	5.702128856	-0.439831428
3185.44	21.13457114	5.194100896	5.709064179	-0.435388592
3186.4	21.1769806	5.213547861	5.720782736	-0.424243269
3187.37	21.23542289	5.233244129	5.736384826	-0.407388095
3188.33	21.30038856	5.251517065	5.754675871	-0.386080532
3189.3	21.36126617	5.269622736	5.778831791	-0.361374015
3190.26	21.41597363	5.288682935	5.812157811	-0.334000582
3191.22	21.46446716	5.307220299	5.851559204	-0.304756701
3192.19	21.50144627	5.325666368	5.891540846	-0.274645358
3193.15	21.5261408	5.344772935	5.928427861	-0.244689667
3194.12	21.54684428	5.363679303	5.963183085	-0.215812323
3195.08	21.56276169	5.382978209	5.993501393	-0.188861612
3196.05	21.5704602	5.402854876	6.016455373	-0.164645766
3197.01	21.57048806	5.423310846	6.032302239	-0.144049672
3197.97	21.56418358	5.445221194	6.043290299	-0.127987612
3198.94	21.55261741	5.469255174	6.050936517	-0.116987537
3199.9	21.53694975	5.494513184	6.056479403	-0.110975214
3200.87	21.51532935	5.520881393	6.059460846	-0.109851856
3201.83	21.48712587	5.547261692	6.057844776	-0.113023204
3202.8	21.45556617	5.572833831	6.051400149	-0.11929101
3203.76	21.42189851	5.597639254	6.042312736	-0.127413622
3204.72	21.38598756	5.621350398	6.033309204	-0.1360549
3205.69	21.35029154	5.64429597	6.024170498	-0.144146164
3206.65	21.31733284	5.666905423	6.014359602	-0.150865801
3207.62	21.28922239	5.688323234	6.003461642	-0.155512965
3208.58	21.27116866	5.707840945	5.992385871	-0.157668886
3209.55	21.26437711	5.725661343	5.983898607	-0.156924507
3210.51	21.26713632	5.740533184	5.978666617	-0.153083015
3211.47	21.27621443	5.751879502	5.977029851	-0.146183104
3212.44	21.29201194	5.761298856	5.981989055	-0.136077886
3213.4	21.31674527	5.769742289	5.991527214	-0.122640239
3214.37	21.34797711	5.77646806	6.002824179	-0.105934159
3215.33	21.38378955	5.78180801	6.015822687	-0.086019473
3216.29	21.42687512	5.786438607	6.029064229	-0.06332609
3217.26	21.47649552	5.790419652	6.041750249	-0.038465891
3218.22	21.52897512	5.79407	6.054661144	-0.012098925
3219.19	21.58399751	5.79806592	6.069652637	0.015099881
3220.15	21.63877861	5.802465473	6.088109204	0.042289134
3221.11	21.69214627	5.806768806	6.109547114	0.06866197
3222.08	21.74384776	5.810647413	6.131203483	0.093722418
3223.04	21.78920697	5.813917463	6.1526899	0.117181871
3224.01	21.82445771	5.817548209	6.174578109	0.138866259

3224.97	21.85163582	5.822798308	6.197395274	0.15894504
3225.94	21.87288657	5.830175572	6.221966468	0.177634751
3226.9	21.88468259	5.837501592	6.246758159	0.195347657
3227.86	21.88483085	5.843927761	6.269465672	0.212753527
3228.83	21.87595821	5.849846915	6.291057264	0.230056353
3229.79	21.85977214	5.854739652	6.315020597	0.247317338
3230.76	21.83549204	5.857482239	6.341957761	0.264819871
3231.72	21.80560896	5.858176368	6.372090995	0.282662602
3232.69	21.76942537	5.857252637	6.405787512	0.300962547
3233.65	21.72277164	5.854481294	6.443819552	0.320146214
3234.61	21.6681204	5.84988005	6.485679303	0.340694139
3235.58	21.60875572	5.844498259	6.527172736	0.3630565
3236.54	21.54918557	5.839031692	6.566245871	0.387522615
3237.51	21.49247065	5.832703085	6.605646517	0.414351476
3238.47	21.43717811	5.824560398	6.646514129	0.443585889
3239.44	21.38645323	5.814743781	6.685140348	0.474629401
3240.4	21.33977612	5.803631095	6.719825771	0.506925302
3241.36	21.2959393	5.793059154	6.750780547	0.539938053
3242.33	21.26057214	5.783755224	6.778541095	0.572927556
3243.29	21.23523234	5.774742189	6.803930995	0.604962879
3244.26	21.21953483	5.766487512	6.826624328	0.635256809
3245.22	21.21503831	5.759703582	6.846317612	0.6632388
3246.19	21.2227597	5.755069104	6.864045572	0.688397307
3247.15	21.24433184	5.752600995	6.879054229	0.710255516
3248.11	21.27981144	5.75157607	6.890126318	0.728339048
3249.08	21.32479303	5.751111343	6.897021393	0.742243576
3250.04	21.37579602	5.750387562	6.899193881	0.75188278
3251.01	21.43044776	5.749369254	6.897694627	0.75709875
3251.97	21.48553483	5.749074876	6.897738159	0.757378999
3252.93	21.53626667	5.751336119	6.901063383	0.752456013
3253.9	21.58076866	5.755578955	6.905537313	0.74226875
3254.86	21.61822985	5.760673731	6.912971592	0.726584123
3255.83	21.64675075	5.76713806	6.923794378	0.705658287
3256.79	21.66731194	5.775043781	6.933909801	0.680468098
3257.76	21.68210249	5.782974925	6.939962488	0.651980188
3258.72	21.69033284	5.789768557	6.943329055	0.621000138
3259.68	21.69096816	5.795220995	6.946475025	0.58811367
3260.65	21.68063433	5.798904677	6.950663632	0.553946307
3261.61	21.65741493	5.800226517	6.954984925	0.519233023
3262.58	21.62554279	5.799580398	6.956489254	0.484673322
3263.54	21.58602338	5.798241493	6.953338259	0.451059193
3264.51	21.54220498	5.796737861	6.947389801	0.419130735
3265.47	21.50357114	5.792727662	6.944839154	0.389608397
3266.43	21.46893333	5.786594726	6.949124577	0.363335431
3267.4	21.43371045	5.779389701	6.958813682	0.341447949
3268.36	21.40267811	5.770923085	6.97226204	0.325074834
3269.33	21.38253134	5.762708706	6.987974129	0.314967173

3270.29	21.37394776	5.754648358	7.00499393	0.311537173
3271.26	21.37263184	5.745320647	7.023844975	0.314833193
3272.22	21.37680796	5.736241045	7.047753383	0.324694406
3273.18	21.38724975	5.728713632	7.077558806	0.3407418
3274.15	21.40162537	5.723655522	7.112695423	0.36215767
3275.11	21.41914627	5.722583184	7.154174229	0.387847471
3276.08	21.44283284	5.725436318	7.200664826	0.416628864
3277.04	21.47577711	5.731186965	7.252264478	0.447199461
3278.01	21.51729453	5.739579701	7.306756716	0.478422397
3278.97	21.56720796	5.750105075	7.356586915	0.5096117
3279.93	21.62318955	5.761063781	7.396459204	0.540165531
3280.9	21.67884776	5.77145801	7.42880995	0.569059596
3281.86	21.7315209	5.781821642	7.457180896	0.594848227
3282.83	21.78474677	5.792806318	7.481013383	0.616083033
3283.79	21.83678955	5.803694378	7.500383333	0.631928406
3284.76	21.8835995	5.813296517	7.514139403	0.641813232
3285.72	21.92410846	5.821282388	7.520026517	0.645142536
3286.68	21.95845124	5.828337214	7.517856368	0.641507411
3287.65	21.98636418	5.83437005	7.512817811	0.631062088
3288.61	22.00581343	5.838830398	7.510052338	0.614470546
3289.58	22.01518557	5.843649403	7.508487313	0.592807685
3290.54	22.01806716	5.849819055	7.505415174	0.567471969
3291.51	22.01761095	5.857979403	7.498381741	0.539784904
3292.47	22.01140448	5.86786209	7.487656468	0.510892068
3293.43	21.99645323	5.877807164	7.476739005	0.481807342
3294.4	21.97275821	5.888294478	7.470963234	0.453410924
3295.36	21.94298607	5.901292438	7.474323731	0.426790426
3296.33	21.90816269	5.917012189	7.486030597	0.40304376
3297.29	21.87099005	5.935047313	7.505947363	0.383241333
3298.25	21.83920647	5.955995373	7.534029502	0.368347815
3299.22	21.81580448	5.980844876	7.568420547	0.359197766
3300.18	21.80006468	6.009442388	7.607341791	0.356524631
3301.15	21.79452488	6.039830547	7.645855274	0.36094095
3302.11	21.79995871	6.070975224	7.682553383	0.372776721
3303.07	21.81644279	6.103264478	7.719806517	0.391901248
3304.04	21.84658657	6.137216318	7.760466617	0.417805875
3305	21.89289801	6.17298393	7.805371194	0.449842109
3305.97	21.95586169	6.210508408	7.8535401	0.487316238
3306.93	22.02941493	6.248629154	7.904212637	0.529302308
3307.9	22.10981891	6.285794527	7.953985871	0.57447992
3308.86	22.19426318	6.322112139	8.000822438	0.621689323
3309.82	22.28211343	6.358820995	8.045958856	0.670326686
3310.79	22.37528706	6.396488308	8.090379502	0.719992407
3311.75	22.47534378	6.435063682	8.135484627	0.770123004
3312.72	22.58120398	6.474727413	8.181702836	0.82026594
3313.68	22.68758458	6.514614179	8.226216517	0.869912109
3314.65	22.78418358	6.554187413	8.26898194	0.918411562

3315.61	22.86544876	6.591302786	8.313452786	0.965364497
3316.57	22.93189801	6.624994428	8.360172935	1.010472358
3317.54	22.98691493	6.656839303	8.409909652	1.053592507
3318.5	23.03001592	6.687009403	8.463790796	1.094860815
3319.47	23.05771741	6.715244826	8.521206517	1.134350965
3320.43	23.06882886	6.741910647	8.58107806	1.172244845
3321.4	23.06513731	6.768289701	8.639531493	1.208632159
3322.36	23.04604129	6.794837811	8.695261841	1.24362992
3323.32	23.01339204	6.820427861	8.749074428	1.277424298
3324.29	22.97290647	6.844697114	8.798920647	1.310229572
3325.25	22.92589851	6.86826607	8.847397612	1.34226181
3326.22	22.87680149	6.891055572	8.89670791	1.373647074
3327.18	22.83242886	6.912534975	8.944978259	1.4046969
3328.15	22.79541493	6.93396005	8.991854229	1.435561577
3329.11	22.76758706	6.955790199	9.037432239	1.465920134
3330.07	22.75089652	6.976948955	9.081582736	1.495385855
3331.04	22.7475194	6.996889154	9.122072289	1.52376083
3332	22.75853781	7.016546617	9.160225473	1.55114899
3332.97	22.78821741	7.036969254	9.199825622	1.577609885
3333.93	22.83767761	7.058249552	9.240019055	1.602507646
3334.89	22.90301642	7.079987413	9.279372189	1.62485288
3335.86	22.97848408	7.100863831	9.317569055	1.643867283
3336.82	23.06099801	7.120245672	9.354762289	1.658813348
3337.79	23.14706617	7.138689502	9.393939602	1.669147865
3338.75	23.23667164	7.154982985	9.435029453	1.674699218
3339.72	23.33127363	7.167829552	9.475626119	1.67519683
3340.68	23.42904925	7.177122488	9.51692607	1.670373985
3341.64	23.522799	7.183155224	9.560819403	1.660218199
3342.61	23.60767363	7.187024975	9.603967413	1.644764286
3343.57	23.68121592	7.190734975	9.643530597	1.62425558
3344.54	23.74027164	7.195546617	9.679185622	1.599076067
3345.5	23.7842597	7.200919453	9.712993682	1.569950644
3346.47	23.81476766	7.205761443	9.74569791	1.537852167
3347.43	23.8297592	7.209965672	9.774749801	1.503750312
3348.39	23.8308403	7.215181841	9.80275199	1.46875274
3349.36	23.82486567	7.222670697	9.830548209	1.434132785
3350.32	23.81018408	7.231107015	9.855116368	1.40128975
3351.29	23.78346816	7.240654776	9.879095473	1.371318258
3352.25	23.7472602	7.25141791	9.904753682	1.345197511
3353.22	23.704899	7.264042338	9.930134279	1.323921591
3354.18	23.6574005	7.278617861	9.956225323	1.307995024
3355.14	23.60276517	7.294709154	9.985093483	1.297426417
3356.11	23.5429607	7.31208995	10.01379348	1.291878904
3357.07	23.48121741	7.330235174	10.03970562	1.290695024
3358.04	23.41975174	7.3480799	10.06545204	1.293073929
3359	23.36231542	7.365292786	10.09462343	1.298269203
3359.97	23.3141597	7.381975721	10.13045905	1.305582686

3360.93	23.27774925	7.396503831	10.17265572	1.314265024
3361.89	23.25145423	7.407061294	10.21662338	1.323390745
3362.86	23.23545473	7.414335423	10.26014403	1.331884024
3363.82	23.23159403	7.420100896	10.30427493	1.338878009
3364.79	23.23781891	7.42509005	10.34860537	1.343705681
3365.75	23.25449502	7.429787562	10.39192657	1.345436541
3366.72	23.28191194	7.434238408	10.43433522	1.343161298
3367.68	23.31753881	7.437703184	10.47649766	1.336225691
3368.64	23.36130398	7.43981607	10.51805219	1.324436427
3369.61	23.4121194	7.440926866	10.55715463	1.307828238
3370.57	23.46680149	7.442167015	10.59250423	1.286348084
3371.54	23.52427164	7.444543831	10.6259199	1.260298501
3372.5	23.57771443	7.446333234	10.65703124	1.23032278
3373.46	23.62217015	7.446685423	10.68481323	1.197052283
3374.43	23.66150498	7.449709055	10.71194438	1.161121636
3375.39	23.69429154	7.458342985	10.73611781	1.123245118
3376.36	23.71705124	7.472439751	10.75367025	1.084054919
3377.32	23.72744975	7.489373383	10.76705776	1.044018402
3378.29	23.72551542	7.507486915	10.77720104	1.003895268
3379.25	23.71416468	7.527078557	10.78472692	0.964844223
3380.21	23.69417413	7.5496799	10.7929896	0.927874137
3381.18	23.66490249	7.574215871	10.80338463	0.89364861
3382.14	23.63216617	7.600102438	10.81839756	0.863209456
3383.11	23.60073184	7.627464627	10.83963289	0.837701695
3384.07	23.56562985	7.654820945	10.86325876	0.818048461
3385.03	23.52408706	7.682455522	10.88757915	0.804943535
3386	23.48271194	7.712064328	10.91525279	0.799088262
3386.96	23.44801393	7.743104229	10.94727766	0.800936471
3387.93	23.42233682	7.773678159	10.98407418	0.810783187
3388.89	23.40988756	7.803483433	11.0286897	0.828605923
3389.86	23.40849403	7.83292393	11.08016771	0.853937714
3390.82	23.41410348	7.861303483	11.13640408	0.885710849
3391.78	23.42725373	7.887783582	11.19687493	0.923612739
3392.75	23.4503801	7.911702736	11.26263756	0.967441744
3393.71	23.48105124	7.932985572	11.33063368	1.016216575
3394.68	23.52425522	7.956040299	11.40061637	1.069131963
3395.64	23.57915672	7.981050746	11.46843542	1.124612958
3396.61	23.64399652	8.00591995	11.53557682	1.180506391
3397.57	23.71718507	8.032509104	11.60185617	1.23538863
3398.53	23.78946567	8.054667413	11.6735003	1.286914152
3399.5	23.84484378	8.076958308	11.74876234	1.333891018
3400.46	23.87245025	8.10108602	11.82598871	1.375262809
3401.43	23.89420448	8.133939104	11.89951542	1.410035098
3402.39	23.94840945	8.173592239	11.98073662	1.443957287
3403.36	24.02355622	8.218387861	12.06161269	1.476395695
3404.32	19.1082209	8.109591692	12.00679632	1.355959973
3405.28	18.99789828	8.15517661	12.05829307	1.381422642

3406.25	18.88757566	8.200761528	12.10978982	1.406885311
3407.21	18.77725304	8.246346446	12.16128657	1.432347979
3408.18	18.66693042	8.291931364	12.21278333	1.457810648
3409.14	18.5566078	8.337516282	12.26428008	1.483273317
3410.11	18.44628518	8.3831012	12.31577683	1.508735985
3411.07	18.33596256	8.428686118	12.36727358	1.534198654
3412.03	18.22563994	8.474271036	12.41877033	1.559661323
3413	18.11531732	8.519855954	12.47026709	1.585123991
3413.96	18.00499471	8.565440872	12.52176384	1.61058666
3414.93	17.89467209	8.61102579	12.57326059	1.636049329
3415.89	17.78434947	8.656610708	12.62475734	1.661511997
3416.86	17.67402685	8.702195626	12.67625409	1.686974666
3417.82	17.56370423	8.747780544	12.72775085	1.712437335
3418.78	17.45338161	8.793365462	12.7792476	1.737900004
3419.75	17.34305899	8.83895038	12.83074435	1.763362672
3420.71	17.23273637	8.884535298	12.8822411	1.788825341
3421.68	17.12241375	8.930120216	12.93373785	1.81428801
3422.64	17.01209113	8.975705134	12.98523461	1.839750678
3423.6	16.90176851	9.021290052	13.03673136	1.865213347
3424.57	16.7914459	9.06687497	13.08822811	1.890676016
3425.53	16.68112328	9.112459888	13.13972486	1.916138684
3426.5	16.57080066	9.158044807	13.19122161	1.941601353
3427.46	16.46047804	9.203629725	13.24271837	1.967064022
3428.43	16.35015542	9.249214643	13.29421512	1.99252669
3429.39	16.2398328	9.294799561	13.34571187	2.017989359
3430.35	16.12951018	9.340384479	13.39720862	2.043452028
3431.32	16.01918756	9.385969397	13.44870537	2.068914697
3432.28	15.90886494	9.431554315	13.50020213	2.094377365
3433.25	15.79854232	9.477139233	13.55169888	2.119840034
3434.21	15.68821971	9.522724151	13.60319563	2.145302703
3435.18	15.57789709	9.568309069	13.65469238	2.170765371
3436.14	15.46757447	9.613893987	13.70618913	2.19622804
3437.1	15.35725185	9.659478905	13.75768589	2.221690709
3438.07	15.24692923	9.705063823	13.80918264	2.247153377
3439.03	15.13660661	9.750648741	13.86067939	2.272616046
3440	15.02628399	9.796233659	13.91217614	2.298078715
3440.96	14.91596137	9.841818577	13.9636729	2.323541384
3441.93	14.80563875	9.887403495	14.01516965	2.349004052
3442.89	14.69531613	9.932988413	14.0666664	2.374466721
3443.85	14.58499352	9.978573331	14.11816315	2.39992939
3444.82	14.4746709	10.02415825	14.1696599	2.425392058
3445.78	14.36434828	10.06974317	14.22115666	2.450854727
3446.75	14.25402566	10.11532809	14.27265341	2.476317396
3447.71	14.14370304	10.160913	14.32415016	2.501780064
3448.68	14.03338042	10.20649792	14.37564691	2.527242733
3449.64	13.9230578	10.25208284	14.42714366	2.552705402
3450.6	13.81273518	10.29766776	14.47864042	2.57816807

3451.57	13.70241256	10.34325268	14.53013717	2.603630739
3452.53	13.59208994	10.38883759	14.58163392	2.629093408
3453.5	13.48176732	10.43442251	14.63313067	2.654556077
3454.46	13.37144471	10.48000743	14.68462742	2.680018745
3455.42	13.26112209	10.52559235	14.73612418	2.705481414
3456.39	13.15079947	10.57117727	14.78762093	2.730944083
3457.35	13.04047685	10.61676218	14.83911768	2.756406751
3458.32	12.93015423	10.6623471	14.89061443	2.78186942
3459.28	12.81983161	10.70793202	14.94211118	2.807332089
3460.24	12.70950899	10.75351694	14.99360794	2.832794757
3461.21	12.59918637	10.79910186	15.04510469	2.858257426
3462.17	12.48886375	10.84468677	15.09660144	2.883720095
3463.14	12.37854113	10.89027169	15.14809819	2.909182763
3464.1	12.26821852	10.93585661	15.19959494	2.934645432
3465.07	12.1578959	10.98144153	15.2510917	2.960108101
3466.03	12.04757328	11.02702645	15.30258845	2.98557077
3466.99	11.93725066	11.07261136	15.3540852	3.011033438
3467.96	11.82692804	11.11819628	15.40558195	3.036496107
3468.92	11.71660542	11.1637812	15.4570787	3.061958776
3469.89	11.6062828	11.20936612	15.50857546	3.087421444
3470.85	11.49596018	11.25495104	15.56007221	3.112884113
3471.82	11.38563756	11.30053595	15.61156896	3.138346782
3472.78	11.27531494	11.34612087	15.66306571	3.16380945
3473.74	11.16499233	11.39170579	15.71456246	3.189272119
3474.71	11.05466971	11.43729071	15.76605922	3.214734788
3475.67	10.94434709	11.48287563	15.81755597	3.240197456
3476.64	10.83402447	11.52846054	15.86905272	3.265660125
3477.6	10.72370185	11.57404546	15.92054947	3.291122794
3478.57	10.61337923	11.61963038	15.97204622	3.316585463
3479.53	10.50305661	11.6652153	16.02354298	3.342048131
3480.49	10.39273399	11.71080022	16.07503973	3.3675108
3481.46	10.28241137	11.75638514	16.12653648	3.392973469
3482.42	10.17208875	11.80197005	16.17803323	3.418436137
3483.39	10.06176613	11.84755497	16.22952998	3.443898806
3484.35	9.951443516	11.89313989	16.28102674	3.469361475
3485.32	9.841120897	11.93872481	16.33252349	3.494824143
3486.28	9.730798278	11.98430973	16.38402024	3.520286812
3487.24	9.620475659	12.02989464	16.43551699	3.545749481
3488.21	9.51015304	12.07547956	16.48701374	3.57121215
3489.17	9.399830421	12.12106448	16.5385105	3.596674818
3490.14	9.289507802	12.1666494	16.59000725	3.622137487
3491.1	9.179185183	12.21223432	16.641504	3.647600156
3492.07	9.068862563	12.25781923	16.69300075	3.673062824
3493.03	8.958539944	12.30340415	16.7444975	3.698525493
3493.99	8.848217325	12.34898907	16.79599426	3.723988162
3494.96	8.737894706	12.39457399	16.84749101	3.74945083
3495.92	8.627572087	12.44015891	16.89898776	3.774913499

3496.89	8.517249468	12.48574382	16.95048451	3.800376168
3497.85	8.406926849	12.53132874	17.00198126	3.825838836
3498.82	8.29660423	12.57691366	17.05347802	3.851301505
3499.78	8.186281611	12.62249858	17.10497477	3.876764174
3500.74	8.075958992	12.6680835	17.15647152	3.902226843

Table 6: Stress-strain curves (Figure 7c) data of the PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations).

Description: Table 6 stress-strain curve data of the individual nanofiber samples with stress in mega-Pascal (MPa) and dimensionless strain.

strain for PVDF	stress (Mpa) for PVDF	strain for PVDF/1.25% CNDs	stress (Mpa) for PVDF/1.25% CNDs	strain for PVDF/2.5% CNDs	stress (Mpa) for PVDF/2.5% CNDs	strain for PVDF/5% CNDs	stress (Mpa) for PVDF/5% CNDs
2.42E-07	0.005984	3.28E-07	0.005984	5.68E-07	0.005984	5.24E-07	0.005984
4.94E-07	0.012093	9.10E-07	0.012093	1.15E-06	0.012093	1.06E-06	0.012093
7.46E-07	0.018202	1.49E-06	0.018202	1.73E-06	0.018202	1.60E-06	0.018202
5.11E-06	0.024311	7.14E-05	0.024311	3.76E-04	0.024311	1.65E-04	0.024311
3.22E-04	0.03042	9.19E-04	0.03042	0.001211	0.03042	8.42E-04	0.03042
8.29E-04	0.107278	0.001731	0.107278	0.002154	0.107278	0.001651	0.107278
0.001359	0.111419	0.002535	0.111419	0.003075	0.111419	0.002563	0.111419
0.00188	0.258874	0.00338	0.258874	0.003965	0.258874	0.003299	0.258874
0.002411	0.377239	0.004215	0.377239	0.00483	0.377239	0.004076	0.377239
0.002948	0.520166	0.004993	0.520166	0.005748	0.520166	0.004884	0.520166
0.003467	0.663094	0.005853	0.663094	0.006667	0.663094	0.005669	0.663094
0.00402	0.806022	0.006677	0.806022	0.007551	0.806022	0.006428	0.806022
0.004527	0.948949	0.007504	0.948949	0.00844	0.948949	0.007203	0.948949
0.005072	1.091877	0.008273	1.091877	0.009371	1.091877	0.007977	1.091877
0.005596	1.234804	0.00908	1.234804	0.010328	1.234804	0.008762	1.234804
0.006121	1.377732	0.009941	1.377732	0.011191	1.377732	0.009547	1.377732
0.006648	1.52066	0.010761	1.52066	0.012076	1.52066	0.010353	1.52066
0.007177	1.663587	0.011581	1.663587	0.01297	1.663587	0.011133	1.663587
0.007705	1.806515	0.012401	1.806515	0.013863	1.806515	0.011913	1.806515
0.008234	1.949442	0.013221	1.949442	0.014767	1.949442	0.012693	1.949442
0.008762	2.09237	0.014041	2.09237	0.015704	2.09237	0.013474	2.09237
0.009291	2.235298	0.014862	2.235298	0.016642	2.235298	0.014254	2.235298
0.009819	2.378225	0.015682	2.378225	0.017548	2.378225	0.015034	2.378225
0.010348	2.521153	0.016502	2.521153	0.018441	2.521153	0.015814	2.521153
0.010876	2.661432	0.017322	2.661432	0.019334	2.661432	0.016596	2.661432
0.011405	2.788598	0.018142	2.788598	0.020227	2.788598	0.017377	2.788598
0.011935	2.915765	0.018962	2.915765	0.02112	2.915765	0.018158	2.915765
0.012464	3.042931	0.019782	3.042931	0.022013	3.042931	0.018939	3.042931
0.012993	3.170098	0.020602	3.170098	0.02291	3.170098	0.01972	3.170098

0.013523	3.297264	0.021422	3.297264	0.02381	3.297264	0.020501	3.297264
0.014052	3.424431	0.022238	3.424431	0.024711	3.424431	0.021282	3.424431
0.014582	3.539555	0.023053	3.539555	0.025612	3.539555	0.022063	3.539555
0.015111	3.637852	0.023877	3.637852	0.026512	3.637852	0.022804	3.637852
0.015641	3.736149	0.024714	3.736149	0.027413	3.736149	0.023564	3.736149
0.01617	3.834446	0.025552	3.834446	0.028313	3.834446	0.024342	3.834446
0.0167	3.932743	0.02639	3.932743	0.029214	3.932743	0.025121	3.932743
0.017229	4.019057	0.027223	4.019057	0.030114	4.019057	0.025899	4.019057
0.017759	4.092882	0.028039	4.092882	0.031015	4.092882	0.026677	4.092882
0.018288	4.166708	0.028856	4.166708	0.031915	4.166708	0.027456	4.166708
0.018818	4.240533	0.029672	4.240533	0.032815	4.240533	0.028234	4.240533
0.019349	4.314358	0.030489	4.314358	0.033716	4.314358	0.029013	4.314358
0.01988	4.388183	0.031305	4.388183	0.034616	4.388183	0.029791	4.388183
0.020411	4.462008	0.032122	4.462008	0.035516	4.462008	0.03057	4.462008
0.020942	4.535833	0.032945	4.535833	0.036417	4.535833	0.031348	4.535833
0.021473	4.607229	0.033767	4.607229	0.037317	4.607229	0.032124	4.607229
0.022004	4.66495	0.03459	4.66495	0.038217	4.66495	0.0329	4.66495
0.022535	4.722672	0.035413	4.722672	0.039118	4.722672	0.033675	4.722672
0.023067	4.780393	0.036235	4.780393	0.040018	4.780393	0.034451	4.780393
0.023597	4.838115	0.037058	4.838115	0.040918	4.838115	0.035226	4.838115
0.024127	4.895836	0.03788	4.895836	0.041819	4.895836	0.036002	4.895836
0.024656	4.953558	0.038703	4.953558	0.042719	4.953558	0.036778	4.953558
0.025186	5.011279	0.039526	5.011279	0.043619	5.011279	0.037554	5.011279
0.025716	5.069001	0.040348	5.069001	0.04452	5.069001	0.038334	5.069001
0.026245	5.126722	0.041171	5.126722	0.04542	5.126722	0.039114	5.126722
0.026777	5.184443	0.041993	5.184443	0.04632	5.184443	0.039894	5.184443
0.027317	5.236612	0.042816	5.236612	0.047221	5.236612	0.040674	5.236612
0.027851	5.28792	0.043639	5.28792	0.048121	5.28792	0.041454	5.28792
0.02838	5.339227	0.044461	5.339227	0.049022	5.339227	0.042234	5.339227
0.028909	5.390535	0.045284	5.390535	0.049922	5.390535	0.043014	5.390535
0.029438	5.441842	0.046106	5.441842	0.050822	5.441842	0.043794	5.441842
0.029967	5.49315	0.046929	5.49315	0.051723	5.49315	0.044574	5.49315
0.030496	5.520516	0.047752	5.520516	0.052623	5.520516	0.045354	5.520516
0.031025	5.535286	0.048574	5.535286	0.053523	5.535286	0.046134	5.535286
0.031555	5.579872	0.049397	5.579872	0.054424	5.579872	0.046914	5.579872
0.032084	5.624458	0.050219	5.624458	0.055324	5.624458	0.047694	5.624458
0.032613	5.669044	0.051048	5.669044	0.056219	5.669044	0.048474	5.669044
0.033142	5.71363	0.051877	5.71363	0.057102	5.71363	0.049255	5.71363
0.033672	5.758216	0.052706	5.758216	0.057993	5.758216	0.050035	5.758216
0.034201	5.802802	0.053535	5.802802	0.058889	5.802802	0.050815	5.802802
0.03473	5.846875	0.054362	5.846875	0.059786	5.846875	0.051595	5.846875
0.035259	5.888155	0.055188	5.888155	0.060682	5.888155	0.052375	5.888155
0.035789	5.929435	0.056015	5.929435	0.061578	5.929435	0.053155	5.929435
0.036318	5.970716	0.056841	5.970716	0.062474	5.970716	0.053935	5.970716
0.036847	6.011104	0.057667	6.011104	0.063371	6.011104	0.054715	6.011104
0.037376	6.062984	0.058493	6.062984	0.064274	6.062984	0.055495	6.062984
0.037906	6.095448	0.059319	6.095448	0.065179	6.095448	0.056275	6.095448
0.038435	6.127912	0.060145	6.127912	0.066085	6.127912	0.057055	6.127912
0.038964	6.160377	0.060914	6.160377	0.06699	6.160377	0.057834	6.160377
0.039494	6.192841	0.061735	6.192841	0.067896	6.192841	0.058613	6.192841
0.040023	6.225305	0.062555	6.225305	0.068801	6.225305	0.059393	6.225305

0.040552	6.25777	0.063376	6.25777	0.069705	6.25777	0.060172	6.25777
0.041081	6.290234	0.064196	6.290234	0.070605	6.290234	0.060951	6.290234
0.041611	6.322698	0.065017	6.322698	0.071505	6.322698	0.06173	6.322698
0.04214	6.355162	0.065838	6.355162	0.072405	6.355162	0.062509	6.355162
0.042669	6.387627	0.066658	6.387627	0.073305	6.387627	0.063288	6.387627
0.043198	6.420091	0.067476	6.420091	0.074205	6.420091	0.064068	6.420091
0.043728	6.452555	0.06829	6.452555	0.075105	6.452555	0.064847	6.452555
0.044257	6.485019	0.069104	6.485019	0.076006	6.485019	0.065626	6.485019
0.044786	6.517484	0.069918	6.517484	0.076906	6.517484	0.066405	6.517484
0.045315	6.549948	0.07073	6.549948	0.077814	6.549948	0.067184	6.549948
0.045845	6.582412	0.071537	6.582412	0.078722	6.582412	0.067963	6.582412
0.046374	6.612024	0.072344	6.612024	0.079631	6.612024	0.068743	6.612024
0.046903	6.630657	0.073157	6.640657	0.080508	6.640657	0.069522	6.640657
0.047433	6.66929	0.073984	6.66929	0.081385	6.66929	0.070301	6.66929
0.047962	6.688409	0.074811	6.688409	0.082276	6.688409	0.07108	6.688409
0.048491	6.703685	0.075638	6.703685	0.083183	6.703685	0.071859	6.703685
0.04902	6.739611	0.076465	6.718961	0.08409	6.718961	0.072638	6.718961
0.049549	2.70252	0.077291	2.70252	0.084998	2.70252	0.073418	2.70252

Table 7: Average water and oil contact angles (Figure 8a) data before UV-irradiation of the PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations).

Description: Table 7 contains the oil, and water contact angles (OCA, and WCA) of the individual nanofiber samples before the UV-radiation exposure of the samples with both the contact angles (CA) in degrees.

Sample name	Avg. water contact angle (°)	Avg. oil contact angle (°)
PVDF	110	24
PVDF/1.25% CNDs	120	18
PVDF/2.5% CNDs	121	16
PVDF/5% CNDs	125	16

Table 8: Post-UV exposure average water contact angles (Figure 8b) data of PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations).

Description: Table 8 contains the water contact angle (WCA) (in degrees) data of the individual nanofiber samples after the samples' UV-irradiation.

Sample name	Avg. WCA (°) 0 min	Avg. WCA (°) 15 min	Avg. WCA (°) 30 min	Avg. WCA (°) 60 min
PVDF	110	108	105	101
PVDF/1.25% CNDs	120	119	116	114
PVDF/2.5% CNDs	121	120	117	115
PVDF/5% CNDs	125	123	120	118

Table 9: Post-UV exposure average oil contact angles (Figure 8c) data of PVDF and PVDF/CNDs electrospun nanofibers (with various CNDs concentrations).

Description: Table 9 contains the oil contact angle (OCA) (in degrees) data of the individual nanofiber samples after the samples' UV-irradiation.

Sample name	Avg. OCA (°) 0 min	Avg. OCA (°) 15 min	Avg. OCA (°) 30 min	Avg. OCA (°) 60 min
PVDF	24	22	20	18
PVDF/1.25% CNDs	18	18	18	18
PVDF/2.5% CNDs	16	16	16	16
PVDF/5% CNDs	16	16	16	16