

Supporting Information

Hydrogen-driven thermoelectric trigeneration for sustainable homes: Electricity, water, and heat

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Appendix A: Governing equations for the HTPP power generation

Enhanced heat collection *via* the impingement-driven thermal management architecture is captured by Equation (S1), and the corresponding thermal energy is quantified by Equation (S2). The maximum electric current, determined by Equation (S3), therefore leads to the highest attainable electrical power output.

$$\overline{Nu} = \left[1 + \left(\frac{H/D}{0.6\sqrt{f}} \right)^6 \right]^{-0.05} \cdot \sqrt{f} \cdot \frac{1 - 2.2\sqrt{f}}{1 + 0.2\left(\frac{H}{D} - 6\right)\sqrt{f}} Re^{2/3} Pr^{0.42}, \#(S1)$$

$$MQ_{TEM} = \frac{\overline{Nu} \cdot k_f}{D} \cdot A \cdot (T_f - T_{HC}), \#(S2)$$

$$Q_{TEM} = N \left[(\alpha_p - \alpha_n) T_h I_{P_{max}} + k_p A_{leg} \frac{dT}{dz} \Big|_{z=L_0} + k_n A_{leg} \frac{dT}{dz} \Big|_{z=L_0} \right], \#(S3)$$

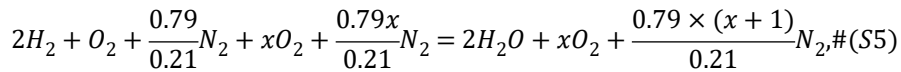
\overline{Nu} is the average Nusselt number, H is the distance between the impinging jet orifice and the target surface (inner surface of the HC), D is the diameter of the impinging jet orifice, f is the ratio of the total area of the jet orifices with the area of the target surface, Re is the Reynolds number, Pr is Prandtl number, M is the number of TEM, Q_{TEM} is the thermal energy passing through the TEM, k_f is the thermal conductivity of the flue gas, A is the area of the target surface, T_f is the temperature of the flue gas, T_{HC} is the temperature of the target surface. N is the thermoelectric couple number of a TEM, α_p is the p-type Seebeck coefficient, α_n is the n-type Seebeck coefficient, T_h is the hot-side temperature, $I_{P_{max}}$ is the maximum electrical current of the TEG, k_p is the thermal conductivity of the p-type leg, k_n is the thermal conductivity of the n-type leg, A_{leg} is the cross-sectional area of the leg, T is the local temperature at the coordinate of z , L_0 is the height of the leg.

Appendix B

Equivalence ratio (ϕ) is a crucial parameter that must be controlled during combustion, and it is defined as follows:

$$\phi = \frac{\left(\frac{Fuel}{Oxidant}\right)}{\left(\frac{Fuel}{Oxidant}\right)_{stoichiometric}}, \#(S4)$$

where (*Fuel*) and (*Oxidant*) denote the molar ratio of fuel and oxidant in the mixture, respectively. Equivalence ratio greater than 1.0 implies fuel-rich mixture gas, and equivalence ratio less than 1.0 represents oxygen-rich mixture gas. For combustion system driven by air blowers, the equivalence ratio is estimated by measuring the oxygen concentration in the flue gas. The chemical equation of pure hydrogen combustion is as follows:



where x is the stoichiometric coefficient of the excessive combustion air. Thus, the O_2 concentration in the flue gas can be obtained with the following equations:

$$[O_2] = \frac{x}{x + \frac{0.79 + 0.79x}{0.21}} = \frac{0.21x}{0.79 + x}, \#(S6)$$

where $[O_2]$ is the volumetric concentration of O_2 in the flue gas. Note that the measured $[O_2]$ in the present study with the Testo-340 gas analyzer has removed the impact of water vapor in the flue gas. As a result, the equivalence ratio (ϕ) of swirl combustion is as follows:

$$\phi = \frac{1}{1 + x} = \frac{1 - 4.762[O_2]}{1 - [O_2]}, \#(S7)$$

Hydrogen combustion provides substantial thermal energy for power generation. The combustion efficiency is defined as follows:

$$\eta_{comb} = \frac{(Fuel)_{in} - (Fuel)_{unburnt}}{(Fuel)_{in}}, \#(S8)$$

where $(Fuel)_{in}$ and $(Fuel)_{unburnt}$ denote the fuel flow rate into the combustor and the unburnt fuel flow rate in the flue gas. Results showed that the hydrogen concentration in the flue gas is less than 50 ppm, which is also confirmed by a hydrogen gas alarm with an alarm threshold of 50 ppm. Thus, the combustion efficiency is almost complete.

For the entire hydrogen-fueled TEG, the overall efficiency (η_{sys}) and the net efficiency (η_{net}) are defined as follows:

$$\eta_{sys} = \frac{P_{tot}}{P_{in}}, \#(S9)$$

$$\eta_{net} = \frac{P_{net}}{P_{in}} = \frac{P_{tot} - P_b - P_p - P_f}{m_f \times LHV_{H_2}}, \#(S10)$$

where P_{tot} is the total electric power generated by the CP-TEG. P_{net} and P_{in} are the net electric power and input power of the CP-TEG, respectively. LHV_{H_2} is the lower heat value (LHV) of the pure hydrogen. P_b , P_p , and P_f are the power consumptions of the air blower, water pumps, and cooling fans, sequentially. The heating power (P_{heat}) from the trigeneration system is defined as follows:

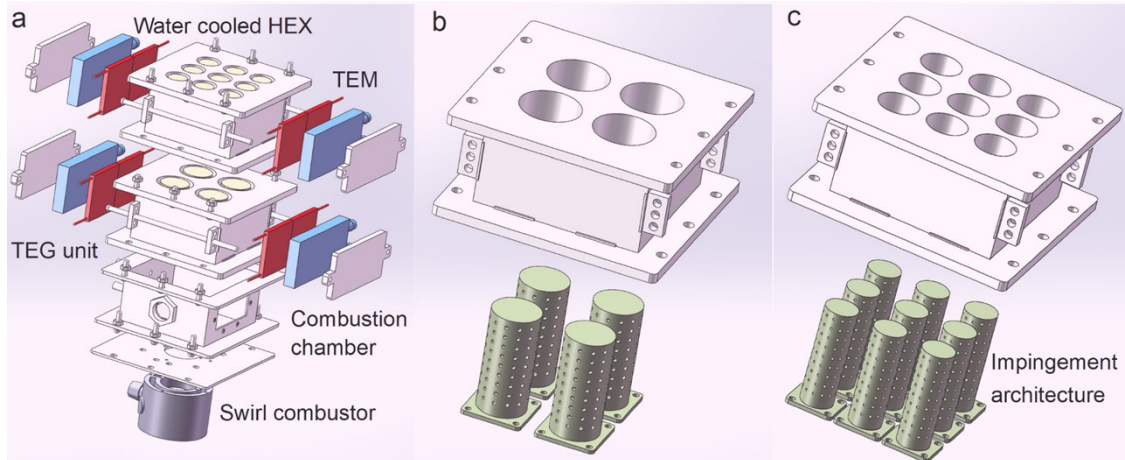
$$P_{heat} = c_p \rho_{air} U_{air-1} A_{rad} (T_{air-1} - T_{atm}), \#(S11)$$

where c_p , ρ_{air} , and A_{rad} are the air thermal capacity, air density, and the air outlet area (0.0432 m²) of the radiator. As demonstrated previously, the hydrogen-fueled CP-TEG is an inherent CHP solution. The CHP efficiency is defined as follows:

$$\eta_{CHP} = \frac{P_{tot} + P_{heat}}{P_{in}} = \frac{P_{tot} + P_{heat}}{m_f \times LHV_{H_2}}, \#(S12)$$

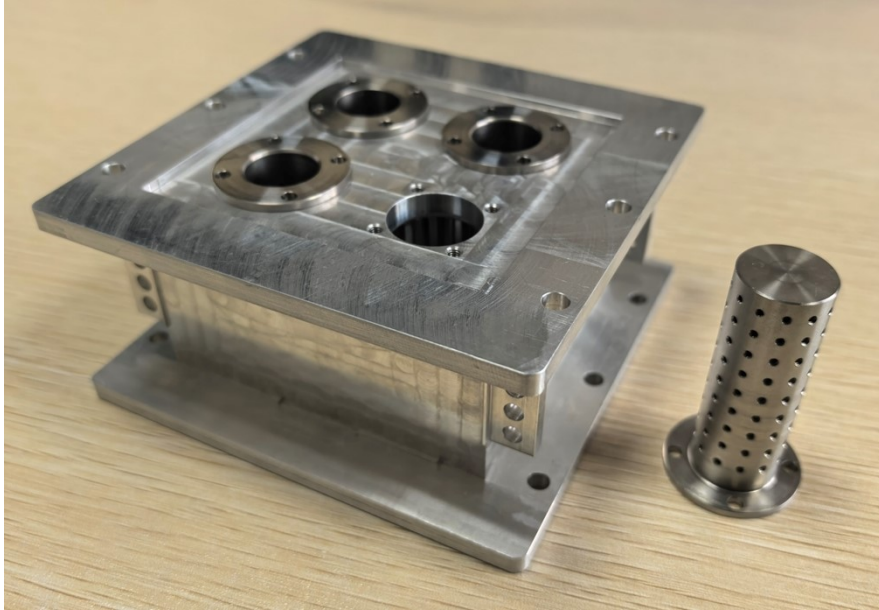
Supplementary Fig. 1.

Figure Configuration of the hydrogen-fueled CP-TEG. (a) Micro-swirl combustor, combustion chamber, and two TEG units. (b) Four-channel heat-collector (HC) assembly. (c) Nine-channel HC assembly.



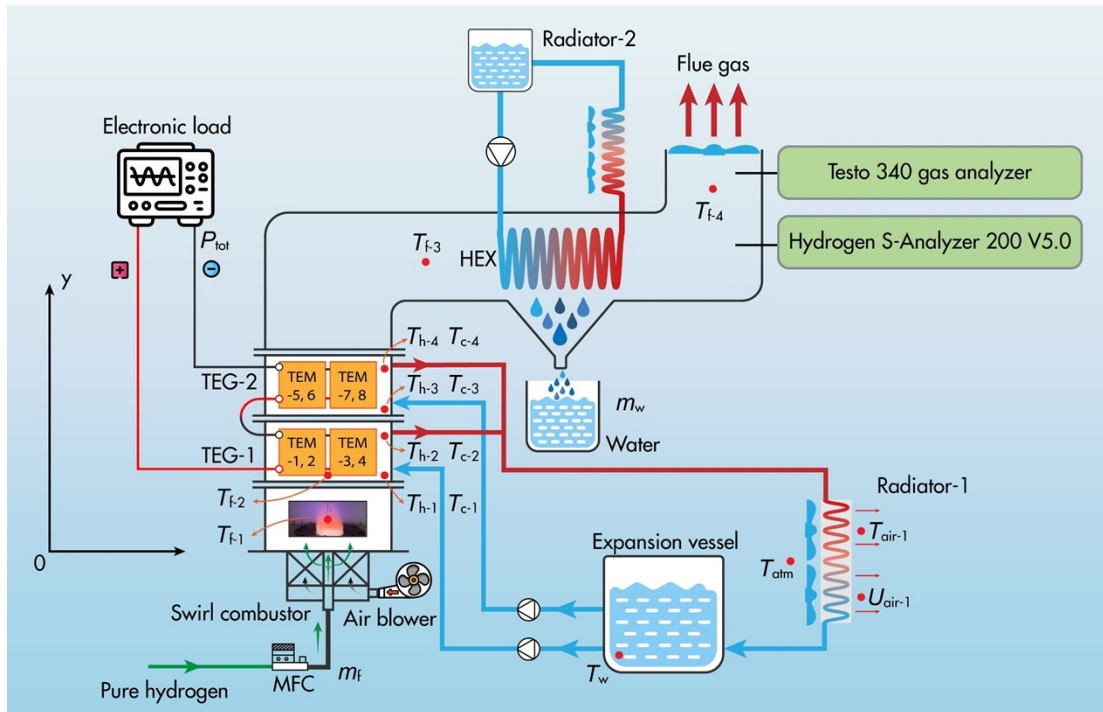
Supplementary Fig. 2.

The HC assembly combines aluminum collectors (Al 6063-T6) with perforated radial stainless-steel nozzles to achieve directed jet-impingement heat transfer.



Supplementary Fig. 3.

Experimental setup of the HPTT system. Here MFC is abbreviated from mass flow controller, TEG is abbreviated from thermoelectric generator, HEX is abbreviated from heat exchanger, P_{tot} is the generated total electric power, m_f is the hydrogen mass flow rate, T_{f-1} is the flue gas temperature at $x = 20$ mm, T_{f-2} is the flue gas temperature at $x = 60$ mm, T_{h-1} and T_{c-1} are the hot-side and cold-side temperatures at $x = 60$ mm, T_{h-2} and T_{c-2} are the hot-side and cold-side temperatures at $x = 80$ mm, T_{h-3} and T_{c-3} are the hot-side and cold-side temperatures at $x = 110$ mm, T_{h-4} and T_{c-4} are the hot-side and cold-side temperatures at $x = 130$ mm, T_{f-3} and T_{f-4} are the flue gas temperatures before and after the HEX, m_w is water mass, T_{atm} is the atmospheric temperature, T_{air-1} is the air temperature leaving the Radiator-1, U_{air-1} is the air velocity leaving the Radiator-1, T_w is the water temperature entering the water pumps.



Supplementary Table 1.

Experimental cases. Here P_{in} is the input power, ϕ is the equivalence ratio, CI is abbreviated from cooling intensity, R_{ld} is the loaded electrical resistance.

No.	P_{in} (kW)	Fuel	ϕ	Cooling mode	CI††	Insulation	R_{ld} † (Ω)
1	1.00	H ₂	0.45	Water-CLC	CI-1	NO	3~24
2	1.25	H ₂	0.45	Water-CLC	CI -1	NO	3~24
3	1.50	H ₂	0.45	Water-CLC	CI -1	NO	3~24
4	1.50	H ₂	0.41	Water-CLC	CI-1	NO	3~24
5	1.50	H ₂	0.43	Water-CLC	CI-1	NO	3~24
6	1.50	H ₂	0.48	Water-CLC	CI-1	NO	3~24
7	1.80	H ₂	0.43	Water-CLC	CI-1	NO	3~24
8	2.00	H ₂	0.43	Water-OLC	/	NO	3~24
9	1.80	H ₂	0.43	Water-CLC	CI-2	NO	3~24
10	1.80	H ₂	0.43	Water-CLC	CI-3	NO	3~24
11	1.70	H ₂	0.43	Water-CLC	CI-1	YES	3~24

† R_{ld} : 3, 4, 5, ... 12, 14, 16, 18, 20, 22, 24 (a total of 16 cases for each series of measurements for power load feature test). ††Cooling Intensity (CI): CI-1: $P_f = P_p = 12.0$ V, CI-2: $P_f = P_p = 11.0$ V, CI-3: $P_f = P_p = 10.0$ V.

Supplementary Table 2.

Standard errors of the measured parameters.

Parameter	Error	Parameter	Error
P (Electric power)	$\pm 0.2\%$	m_f (hydrogen flow rate)	$\pm 0.1\% \text{F.S.}$
T (type-K thermocouple)	$\pm 0.5\%$	T (type-S thermocouple)	$\pm 0.25\%$
U_{air} (air velocity)	$\pm 2.0\%$	η_{sys}	$\pm 0.3\%$
O_2	$\pm 0.2\%$	NO	$\pm 2 \text{ ppm}$
ϕ (equivalence ratio)	$\pm 0.4\%$	P_{heat}	$\pm 3.83\%$

Supplementary Table 3.

Costs for the components of the developed HPTT system.

Component	Quantity	Cost (\$)*	Component	Quantity	Cost (\$)*
Heat collector	2	34.0	Expansion vessel	1	8.0
Combustion chamber	1	8.6	Blower	1	5.8
TEM (40×40 mm)	8	56.4	Swirl combustor	1	24.8
HEX (40×80 mm)	4	28.0	Radiator	3	47.8
Cooling fan	6	40.8	Liquid pump	3	36.0
Ignitor system	1	17.8	Other accessories	\	60.0**
Water collection system	1	52.0	Total	-	420.0

*The exchange rate is 1 \$ = 7.3 ¥. The material prices of aluminum 6061-T6 and stainless steel 304 are taken as 3.9 and 2.1 \$ per kilogram, respectively. **Estimated cost.

Original Data

Data of Fig.1 d:

Reference No.	P_{tot} (W)	η_{sys} (%)
Schaevitz et al. [35]	0.075	0.02
Vican, et al. [36]	0.57	0.052
Federici, et al. [37]	1	0.85
Yoshida, et al. [38]	0.185	2.8
Abedi, et al. [39]	5.92	2.27
Li, et al. [40]	14.6	1.74
This work	61.8	3.1

Data of Fig.1 e:

Reference No.	UPC ($\text{kg}\cdot\text{kWh}^{-1}$)	WHR ($\text{kg}\cdot\text{h}^{-1}$)
Anbarasu and Pavithra [46]	0.694	0.763
Bagheri [52]	0.98	0.66
Ahmad, et al. [53]	0.44	0.36
Pontious, et al. [47]	0.23	0.005
Liu, et al. [48]	0.43	0.025
Casallas, et al. [49]	0.142	0.005
Pokorny, et al. [45]	1	1.45
Kwan, et al. [43]	5	3

This work	37.6	0.258
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Data of Fig.1 f:

Reference No.	η_{CHP} (%)
Obernberger et al. [54]	90.6
Li et al. [30]	92.5
Tian et al. [55]	61
Abass [56]	85
Gao et al. [5]	93
This work	94.6

Data of Fig.2 c:

$R_{ld} (\Omega)$	$P_{tot} (W)$ Insulated	$P_{tot} (W)$ Uninsulated
24	39.37	40.25
22	40.88	42.18
20	42.65	43.98
18	44.21	45.72
16	45.64	47.37
14	46.89	48.73
12	48	49.76
11	48.17	49.99
10	47.92	49.9
9	47.33	49.6
8	46.4	48.79
7	45.36	47.92
6	43.96	46.42
5	41.55	43.97
4	37.76	40.38
3	32.36	35.2

Data of Fig.2 f:

t (h)	m_{water} (g)
0.01667	2.92
0.08333	18.27
0.16667	39.21
0.25	61.86
0.33333	90.76
0.41667	107.18
0.5	127.17
0.58333	149.38
0.66667	171.22
0.75	194.95
0.83333	215.68
0.91667	236
1	258.23
1.08333	280.09
1.16667	301.67

Data of Fig.3 b:

$R_{ld} (\Omega)$	$P_{tot} (W)$ at $\phi=0.41$	$P_{tot} (W)$ at $\phi=0.43$	$P_{tot} (W)$ at $\phi=0.45$	$P_{tot} (W)$ at $\phi=0.48$
24	21.39	27.32	24.27	23.29
22	22.53	28.64	25.37	24.34
20	23.62	29.8	26.41	25.39
18	24.66	30.94	27.47	26.43
16	25.75	31.99	28.5	27.47
14	26.71	32.94	29.48	28.4
12	27.48	33.68	30.26	29.18
11	27.78	33.85	30.53	29.4
10	27.95	33.9	30.63	29.46
9	27.97	33.78	30.61	29.43
8	27.84	33.12	30.42	29.2
7	27.41	32.45	29.94	28.66
6	26.61	31.34	29.14	27.92
5	25.36	29.73	27.79	26.54
4	23.43	27.17	25.67	24.48
3	20.52	23.64	22.44	21.4

Data of Fig.3 c:

R_{ld} (Ω)	η_{sys} (%) at $\phi=0.41$	η_{sys} (%) at $\phi=0.43$	η_{sys} (%) at $\phi=0.45$	η_{sys} (%) at $\phi=0.48$
24	1.426	1.82133	1.618	1.55267
22	1.502	1.90933	1.69133	1.62267
20	1.57467	1.98667	1.76067	1.69267
18	1.644	2.06267	1.83133	1.762
16	1.71667	2.13267	1.9	1.83133
14	1.78067	2.196	1.96533	1.89333
12	1.832	2.24533	2.01733	1.94533
11	1.852	2.25667	2.03533	1.96
10	1.86333	2.26	2.042	1.964
9	1.86467	2.252	2.04067	1.962
8	1.856	2.208	2.028	1.94667
7	1.82733	2.16333	1.996	1.91067
6	1.774	2.08933	1.94267	1.86133
5	1.69067	1.982	1.85267	1.76933
4	1.562	1.81133	1.71133	1.632
3	1.368	1.576	1.496	1.42667

Data of Fig.3 f:

y (mm)	1.8 kW CLC		2.0 kW OLC	
	T_h (K)	T_c (K)	T_h (K)	T_c (K)
60	525.1	325.4	528.8	304.5
80	522.4	328.2	525.7	304.8
110	488.1	325.4	489	304.5
130	486.5	327.3	487	304.6

Data of Fig.3 g:

R_{ld} (Ω)	P_{tot} (W) at 1.8 kW	P_{tot} (W) at 2.0 kW
24	40.25	47.14
22	42.18	49.74
20	43.98	52.19
18	45.72	54.66
16	47.37	56.92
14	48.73	59.02
12	49.76	60.82
11	49.99	61.45
10	49.9	61.79
9	49.6	61.92
8	48.79	61.57
7	47.92	60.61
6	46.42	58.93
5	43.97	56.1
4	40.38	51.58
3	35.2	44.91

Data of Fig.3 h:

$R_{ld} (\Omega)$	$P_{tot} (W)$ at CI-3	$P_{tot} (W)$ at CI-2	$P_{tot} (W)$ at CI-1
24	38.8	39.02	40.25
22	40.57	40.88	42.18
20	42.33	43.05	43.98
18	44.22	44.75	45.72
16	45.85	46.32	47.37
14	47.31	47.84	48.73
12	48.42	49.04	49.76
11	48.67	49.41	49.99
10	48.6	49.21	49.9
9	48.2	48.97	49.6
8	47.17	48.14	48.79
7	46.16	46.88	47.92
6	44.3	45.04	46.42
5	42.38	42.87	43.97
4	38.93	39.11	40.38
3	33.9	34.11	35.2

Data of Fig.3 j:

R_{ld} (Ω)	η_{sys} (%) at 1.7 kW CLC insulated	η_{sys} (%) at 1.8 Kw CLC uninsulated
24	2.31588	2.23611
22	2.40471	2.34333
20	2.50882	2.44333
18	2.60059	2.54
16	2.68471	2.63167
14	2.75824	2.70722
12	2.82353	2.76444
11	2.83353	2.77722
10	2.81882	2.77222
9	2.78412	2.75556
8	2.72941	2.71056
7	2.66824	2.66222
6	2.58588	2.57889
5	2.44412	2.44278
4	2.22118	2.24333
3	1.90353	1.95556

Data of Fig.3 k:

$R_{ld} (\Omega)$	$P_{tot} (W)$ at 1.7 kW CLC insulated	$P_{tot} (W)$ at 1.8 Kw CLC uninsulated
24	39.37	40.25
22	40.88	42.18
20	42.65	43.98
18	44.21	45.72
16	45.64	47.37
14	46.89	48.73
12	48	49.76
11	48.17	49.99
10	47.92	49.9
9	47.33	49.6
8	46.4	48.79
7	45.36	47.92
6	43.96	46.42
5	41.55	43.97
4	37.76	40.38
3	32.36	35.2

Data of Fig.4 d:

Hydrogen:

t (h)	m_{water} (g)
0.01667	2.92
0.08333	18.27
0.16667	39.21
0.25	61.86
0.33333	90.76
0.41667	107.18
0.5	127.17
0.58333	149.38
0.66667	171.22
0.75	194.95
0.83333	215.68
0.91667	236
1	258.23

1.08333	280.09
1.16667	301.67
1.25	317.8656
1.33333	352.655
1.41667	357.1991
1.5	399.7076
1.58333	406.8353
1.66667	434.4008
1.75	443.9622
1.83333	490.8797
1.91667	489.9076
2	527.9019
2.08333	538.624
2.16667	567.5591
2.25	567.2641
2.33333	621.6694
2.41667	620.0936

2.5	657.776
2.58333	653.597
2.66667	713.5362
2.75	700.8883
2.83333	750.8961
2.91667	752.5769
3	785.0487
3.08333	782.8712
3.16667	846.8779
3.25	831.2046
3.33333	879.426
3.41667	887.251
3.5	920.7668
0.01667	2.86744
0.08333	18.48924
0.16667	38.85711
0.25	63.4065

0.33333	88.40024
0.41667	107.5015
0.5	125.644
0.58333	152.2182
0.66667	170.7063
0.75	196.5096
0.83333	211.1507
0.91667	242.844
1	253.8401
1.08333	284.0113
1.16667	300.4633
1.25	324.8587
1.33333	342.428
1.41667	359.3423
1.5	393.712
1.58333	413.7515
1.66667	431.36

1.75	448.8458
1.83333	479.5894
1.91667	503.1351
2	517.8718
2.08333	543.4716
2.16667	564.7213
2.25	580.8785
2.33333	604.2627
2.41667	638.6964
2.5	648.5671
2.58333	663.4009
2.66667	712.1091
2.75	707.8972
2.83333	732.1237
2.91667	773.6491
3	772.488
3.08333	795.3971

3.16667	840.1029
3.25	842.0102
3.33333	860.0787
3.41667	914.7557
3.5	908.7968
0.01667	2.86744
0.08333	18.48924
0.16667	38.85711
0.25	63.4065
0.33333	88.40024
0.41667	107.5015
0.5	125.644
0.58333	152.2182
0.66667	170.7063
0.75	196.5096
0.83333	211.1507
0.91667	242.844

1	253.8401
1.08333	284.0113
1.16667	300.4633
1.25	324.8587
1.33333	342.428
1.41667	359.3423
1.5	393.712
1.58333	413.7515
1.66667	431.36
1.75	448.8458
1.83333	479.5894
1.91667	503.1351
2	517.8718
2.08333	543.4716
2.16667	564.7213
2.25	580.8785
2.33333	604.2627

2.41667	638.6964
2.5	648.5671
2.58333	663.4009
2.66667	712.1091
2.75	707.8972
2.83333	732.1237
2.91667	773.6491
3	772.488
3.08333	795.3971
3.16667	840.1029
3.25	842.0102
3.33333	860.0787
3.41667	914.7557
3.5	908.7968
0.01667	2.89664
0.08333	19.14696
0.16667	39.68052

0.25	63.59208
0.33333	90.39696
0.41667	112.7534
0.5	129.7134
0.58333	154.7577
0.66667	171.9049
0.75	203.5278
0.83333	213.0918
0.91667	249.216
1	262.3617
1.08333	286.8122
1.16667	301.67
1.25	330.5803
1.33333	355.4763
1.41667	368.6295
1.5	393.3123
1.58333	427.1771

1.66667	440.4824
1.75	455.5052
1.83333	489.8979
1.91667	510.4837
2	531.0693
2.08333	556.9372
2.16667	561.8835
2.25	597.8964
2.33333	632.8595
2.41667	633.7357
2.5	653.8293
2.58333	683.6624
2.66667	720.6716
2.75	721.915
2.83333	752.3978
2.91667	781.1749
3	774.0581

3.08333	828.2777
3.16667	859.5811
3.25	851.9847
3.33333	878.5466
3.41667	923.6283
3.5	927.2122
0.01667	2.79152
0.08333	18.61713
0.16667	38.34738
0.25	58.4577
0.33333	91.84912
0.41667	106.2154
0.5	122.9734
0.58333	150.1269
0.66667	168.3093
0.75	185.5924
0.83333	219.3466

0.91667	229.864
1	255.1312
1.08333	280.3701
1.16667	289.3015
1.25	320.7264
1.33333	340.3121
1.41667	355.7703
1.5	405.3035
1.58333	395.0371
1.66667	426.5816
1.75	446.626
1.83333	477.6259
1.91667	486.9681
2	537.4042
2.08333	521.388
2.16667	560.1808
2.25	568.9659

2.33333	594.9376
2.41667	626.9146
2.5	641.3316
2.58333	643.793
2.66667	718.531
2.75	674.9554
2.83333	750.1452
2.91667	763.8656
3	760.7122
3.08333	767.9966
3.16667	850.2654
3.25	793.8004
3.33333	870.6318
3.41667	898.7852
3.5	884.8569

Propane:

t (h)	m_{water} (g)
0.16667	15
0.33333	31
0.5	47
0.66667	63
0.83333	79
1	95
1.16667	112
1.33333	128
1.5	144
1.66667	159
1.83333	175
2	190
2.16667	206
2.33333	222
2.5	237

2.66667	252
2.83333	268
3	283
3.16667	298
3.33333	314
3.5	330

Data of Fig.4 e:

t (h)	WHR (g·h ⁻¹)	t (h)	WHR (g·h ⁻¹)	t (h)	WHR (g·h ⁻¹)
0.25	247.44	0.25	249.61	0.25	253.69899
0.33333	272.28	0.33333	275.42565	0.33333	274.59329
0.41667	257.232	0.41667	259.12754	0.41667	253.58291
0.5	254.34	0.5	260.0507	0.5	240.34647
0.58333	256.08	0.58333	247.3953	0.58333	254.36964
0.66667	256.83	0.66667	254.14227	0.66667	265.89173
0.75	259.93333	0.75	250.07822	0.75	258.06129
0.83333	258.816	0.83333	252.42454	0.83333	261.81102
0.91667	257.45455	0.91667	256.26382	0.91667	261.11066
1	258.23	1	248.38059	1	261.28047
1.08333	258.54462	1.08333	251.80151	1.08333	245.48579
1.16667	258.57429	1.16667	259.99438	1.16667	255.3403
1.25	254.29251	1.25	253.82106	1.25	254.81203

1.33333	264.49128	1.33333	257.99299	1.33333	252.75844
1.41667	252.14054	1.41667	252.45546	1.41667	243.89706
1.5	266.47172	1.5	270.91114	1.5	259.5216
1.58333	256.94863	1.58333	246.7876	1.58333	243.0603
1.66667	260.64048	1.66667	264.91681	1.66667	257.13695
1.75	253.6927	1.75	255.94295	1.75	260.50511
1.83333	267.75255	1.83333	263.41978	1.83333	272.09496
1.91667	255.60395	1.91667	248.16179	1.91667	261.51837
2	263.95096	2	271.07896	2	258.87888
2.08333	258.5395	2.08333	254.28962	2.08333	246.1751
2.16667	261.95034	2.16667	253.17291	2.16667	261.83272
2.25	252.11739	2.25	243.73953	2.25	253.2146
2.33333	266.42975	2.33333	271.5785	2.33333	261.87593
2.41667	256.59045	2.41667	257.17061	2.41667	259.03627
2.5	263.11038	2.5	267.45144	2.5	273.55481
2.58333	253.00527	2.58333	255.80882	2.58333	259.23376
2.66667	267.57608	2.66667	266.91677	2.66667	276.00874

2.75	254.86847	2.75	262.03486	2.75	256.41986
2.83333	265.02214	2.83333	261.44354	2.83333	257.90073
2.91667	258.02637	2.91667	257.67623	2.91667	266.91796
3	261.68291	3	266.40838	3	265.63302
3.08333	253.90416	3.08333	254.74103	3.08333	255.23716
3.16667	267.43513	3.16667	272.86914	3.16667	261.88719
3.25	255.75525	3.25	255.86139	3.25	264.39876
3.33333	263.82781	3.33333	266.28669	3.33333	262.56144
3.41667	259.68321	3.41667	250.12894	3.41667	262.25901
3.5	263.07622	3.5	256.75003	3.5	258.78782
3.58333	263.53441	3.58333	258.33145	3.58333	261.93502
3.66667	266.44315	3.66667	257.27351	3.66667	276.09265
3.75	263.91096	3.75	257.65495	3.75	266.43052
3.83333	257.0778	3.83333	248.61223	3.83333	263.91119
3.91667	258.19019	3.91667	252.88645	3.91667	249.17316
4	259.70137	4	260.8695	4	254.77431
4.08333	258.89037	4.08333	255.1463	4.08333	246.14649

4.16667	257.71069	4.16667	254.08032	4.16667	242.56581
4.25	254.76582	4.25	248.31133	4.25	240.6416
4.33333	267.34778	4.33333	261.65006	4.33333	261.51291
4.41667	256.29953	4.41667	262.85208	4.41667	261.92479
4.5	254.82409	4.5	256.19046	4.5	240.74047
4.58333	267.06611	4.58333	267.7709	4.58333	277.36765
4.66667	256.56083	4.66667	249.372	4.66667	246.58626
4.75	265.61628	4.75	268.54842	4.75	257.37952
4.83333	264.15909	4.83333	256.61418	4.83333	261.58961
4.91667	266.24281	4.91667	262.66504	4.91667	255.49006
5	266.16088	5	273.95061	5	261.69709
5.08333	261.19425	5.08333	262.44798	5.08333	270.3303
5.16667	264.15925	5.16667	263.8914	5.16667	263.6349
5.25	261.32354	5.25	263.39401	5.25	266.63912
5.33333	266.58541	5.33333	271.65053	5.33333	269.05452
5.41667	262.24296	5.41667	265.99828	5.41667	257.81053
5.5	260.69791	5.5	254.44976	5.5	264.34925

5.58333	257.26254	5.58333	247.55011	5.58333	251.31463
5.66667	253.94603	5.66667	249.39582	5.66667	239.29004
5.75	267.25546	5.75	261.57414	5.75	263.45936
5.83333	265.91739	5.83333	259.20803	5.83333	260.15868
5.91667	267.89778	5.91667	274.86419	5.91667	276.23717
6	265.35264	6	271.01686	6	268.75181
6.08333	253.56496	6.08333	249.00764	6.08333	255.21339
6.16667	259.61566	6.16667	261.14246	6.16667	266.73328
6.25	254.41713	6.25	251.28627	6.25	243.82193
6.33333	266.76245	6.33333	273.16955	6.33333	270.27305
6.41667	252.5047	6.41667	250.51496	6.41667	237.59203
6.5	253.45514	6.5	248.0165	6.5	238.77401
6.58333	253.61497	6.58333	247.84878	6.58333	256.33702
6.66667	257.69105	6.66667	257.50963	6.66667	255.72074
6.75	256.11063	6.75	250.57659	6.75	242.92836
6.83333	259.83173	6.83333	260.07103	6.83333	269.73391
6.91667	257.93234	6.91667	263.82558	6.91667	266.04483

7	260.82637	7	257.68549	7	270.95686
7.08333	267.74341	7.08333	261.14407	7.08333	272.27845
7.16667	257.83487	7.16667	265.52557	7.16667	246.3357
7.25	264.38339	7.25	263.23782	7.25	266.73429
7.33333	259.55369	7.33333	250.82335	7.33333	259.31283
7.41667	253.99511	7.41667	244.67298	7.41667	258.93938
7.5	256.40687	7.5	248.11852	7.5	255.45791
7.58333	255.63725	7.58333	256.6396	7.58333	256.04729
7.66667	257.14039	7.66667	261.11218	7.66667	249.93017
7.75	262.96412	7.75	260.21641	7.75	267.06426
7.83333	257.33807	7.83333	248.18893	7.83333	243.04423
7.91667	259.50895	7.91667	256.06086	7.91667	251.70292
8	262.67874	8	270.48765	8	269.53781
8.08333	264.73066	8.08333	263.94653	8.08333	257.30576
8.16667	266.92312	8.16667	274.3903	8.16667	274.7026
8.25	261.79865	8.25	267.10138	8.25	256.99569
8.33333	255.55613	8.33333	245.53935	8.33333	263.57267

8.41667	254.44752	8.41667	257.10675	8.41667	257.85534
8.5	255.72982	8.5	257.70406	8.5	250.2572
8.58333	258.41401	8.58333	257.79071	8.58333	258.49721
8.66667	257.53562	8.66667	252.04444	8.66667	267.24291
8.75	255.42938	8.75	256.67255	8.75	259.9607
8.83333	257.01142	8.83333	248.73797	8.83333	261.41274
8.91667	263.56197	8.91667	261.04074	8.91667	260.32938
9	260.20358	9	258.05976	9	257.66295
9.08333	263.86147	9.08333	270.92425	9.08333	252.86162
9.16667	264.89633	9.16667	270.54127	9.16667	266.54901
9.25	263.60483	9.25	257.92072	9.25	273.12835
9.33333	261.22052	9.33333	259.92513	9.33333	265.54607
9.41667	254.22299	9.41667	247.23338	9.41667	256.86767
9.5	267.06292	9.5	273.44146	9.5	265.83764
9.58333	257.42207	9.58333	262.81146	9.58333	265.69614
9.66667	265.56325	9.66667	260.4886	9.66667	263.65306
9.75	262.56437	9.75	263.80525	9.75	267.54811

9.83333	259.99104	9.83333	260.6743	9.83333	255.67363
9.91667	257.91225	9.91667	250.35516	9.91667	242.56879
10	267.1781	10	270.75188	10	266.18393
10.08333	263.83438	10.08333	263.2426	10.08333	272.0486
10.16667	262.16394	10.16667	265.96636	10.16667	250.11357
10.25	252.78006	10.25	252.05331	10.25	242.57988
10.33333	267.16504	10.33333	256.48912	10.33333	273.1685
10.41667	262.31904	10.41667	257.77856	10.41667	259.747
10.5	263.21529	10.5	253.04544	10.5	255.36305
10.58333	262.73255	10.58333	269.31059	10.58333	266.43629
10.66667	255.72693	10.66667	261.22788	10.66667	246.21824
10.75	266.0565	10.75	270.90325	10.75	273.83785
10.83333	257.5752	10.83333	252.81676	10.83333	262.21285
10.91667	259.85762	10.91667	250.51704	10.91667	259.66143
11	267.56989	11	273.3122	11	253.86415
11.08333	267.43562	11.08333	274.46543	11.08333	265.85561
11.16667	255.81334	11.16667	247.11466	11.16667	250.25349

11.25	258.4641	11.25	256.91822	11.25	254.28266
11.33333	258.51535	11.33333	249.42724	11.33333	251.47753
11.41667	262.76487	11.41667	266.24441	11.41667	252.03434
11.5	262.3842	11.5	265.95472	11.5	269.71889
11.58333	256.72473	11.58333	248.76293	11.58333	259.21984
11.66667	257.87431	11.66667	256.13881	11.66667	243.31937
11.75	253.71122	11.75	253.3271	11.75	243.47879
11.83333	266.94877	11.83333	261.22379	11.83333	268.96637
11.91667	266.9726	11.91667	272.59771	11.91667	268.95701
12	259.6946	12	256.99897	12	248.10469
12.08333	263.79106	12.08333	257.15039	12.08333	271.46395
12.16667	267.09425	12.16667	266.49356	12.16667	259.75958
12.25	261.16501	12.25	264.06263	12.25	268.97854
12.33333	264.03417	12.33333	257.19067	12.33333	248.69352
12.41667	260.21008	12.41667	255.47946	12.41667	262.92875
12.5	263.17296	12.5	270.97867	12.5	273.01747
12.58333	267.0419	12.58333	268.50822	12.58333	277.49792

12.66667	268.12213	12.66667	265.61975	12.66667	274.49969
12.75	260.68388	12.75	259.7011	12.75	252.98197
12.83333	254.91212	12.83333	246.87474	12.83333	261.8623
12.91667	267.79715	12.91667	261.29744	12.91667	263.18755
13	259.4264	13	255.18893	13	269.18057
13.08333	261.15695	13.08333	261.46564	13.08333	271.44576
13.16667	260.03729	13.16667	253.82448	13.16667	251.71271
13.25	258.47445	13.25	252.11986	13.25	267.81133
13.33333	258.7852	13.33333	249.71996	13.33333	253.23633
13.41667	260.1106	13.41667	261.19709	13.41667	262.68154
13.5	254.75778	13.5	248.65022	13.5	264.80212
13.58333	256.55286	13.58333	262.55081	13.58333	248.48787
13.66667	258.52578	13.66667	263.74128	13.66667	250.25916
13.75	261.01762	13.75	251.87156	13.75	250.62546
13.83333	259.8257	13.83333	253.76137	13.83333	253.5717
13.91667	263.21479	13.91667	265.01202	13.91667	259.69192
14	262.36499	14	255.80508	14	258.16374

14.08333	260.77987	14.08333	252.76402	14.08333	270.46133
14.16667	259.2942	14.16667	265.90257	14.16667	257.90361
14.25	262.00735	14.25	262.00028	14.25	263.54193
14.33333	253.32715	14.33333	251.5759	14.33333	253.51132
14.41667	255.17635	14.41667	258.98434	14.41667	245.04253
14.5	265.32748	14.5	269.71202	14.5	254.27526
14.58333	256.07878	14.58333	249.2489	14.58333	263.30967
14.66667	253.09269	14.66667	244.68622	14.66667	252.55285
14.75	252.8833	14.75	250.39846	14.75	244.37782
14.83333	253.43577	14.83333	250.81296	14.83333	260.45873
14.91667	264.97745	14.91667	263.04099	14.91667	258.89171
15	266.99382	15	269.9401	15	253.7592
15.08333	259.05881	15.08333	260.90746	15.08333	244.63235
15.16667	260.35129	15.16667	267.87336	15.16667	248.48839
15.25	265.48811	15.25	256.69753	15.25	273.07125
15.33333	261.26352	15.33333	258.17617	15.33333	248.56455
15.41667	257.40813	15.41667	253.22551	15.41667	251.82907

15.5	266.70128	15.5	272.11985	15.5	254.64025
15.58333	260.85936	15.58333	254.96551	15.58333	254.72969
15.66667	259.54532	15.66667	252.61936	15.66667	249.31093
15.75	256.41297	15.75	254.20858	15.75	258.74094
15.83333	265.07421	15.83333	262.29941	15.83333	250.28519
15.91667	254.87142	15.91667	249.64605	15.91667	254.69811
16	253.91094	16	248.19439	16	255.88789
16.08333	256.64802	16.08333	262.96901	16.08333	246.12314
16.16667	252.82034	16.16667	250.54976	16.16667	241.93946
16.25	253.6943	16.25	258.84277	16.25	243.26822
16.33333	257.08263	16.33333	256.70292	16.33333	247.85619
16.41667	263.49207	16.41667	253.88542	16.41667	273.98749
16.5	256.99138	16.5	264.68827	16.5	258.20721
16.58333	253.29694	16.58333	257.98851	16.58333	247.52177
16.66667	264.39251	16.66667	271.75055	16.66667	255.57925
16.75	265.00659	16.75	271.59095	16.75	251.54956
16.83333	266.67295	16.83333	271.8488	16.83333	271.44133

16.91667	260.18622	16.91667	252.80786	16.91667	256.33676
17	266.52022	17	264.91976	17	251.96581
17.08333	264.57508	17.08333	257.95065	17.08333	254.76702
17.16667	258.98433	17.16667	255.89542	17.16667	258.64894
17.25	258.39142	17.25	249.1162	17.25	260.53348
17.33333	267.25941	17.33333	263.65889	17.33333	254.55764
17.41667	257.34047	17.41667	264.79614	17.41667	252.16561
17.5	263.06152	17.5	257.42253	17.5	262.90868
17.58333	254.69348	17.58333	258.48459	17.58333	239.61486
17.66667	263.09565	17.66667	260.95169	17.66667	252.21744
17.75	263.11362	17.75	260.38014	17.75	267.09585
17.83333	267.55013	17.83333	274.7772	17.83333	271.30012
17.91667	253.49269	17.91667	261.01635	17.91667	258.63149
18	264.694	18	264.4039	18	267.69378
18.08333	253.01738	18.08333	255.62068	18.08333	252.28692
18.16667	267.20273	18.16667	259.41003	18.16667	255.81749
18.25	261.27168	18.25	256.24743	18.25	253.24933

18.33333	258.58398	18.33333	265.7752	18.33333	246.5681
18.41667	256.79155	18.41667	256.93099	18.41667	263.12634
18.5	266.14303	18.5	265.5985	18.5	255.15824
18.58333	258.7742	18.58333	261.97213	18.58333	255.01033
18.66667	257.07106	18.66667	247.81702	18.66667	257.20988
18.75	263.06955	18.75	263.3042	18.75	271.66666
18.83333	254.78557	18.83333	253.5626	18.83333	243.82342
18.91667	264.99934	18.91667	270.21717	18.91667	253.14273
19	259.82959	19	252.29973	19	250.85222
19.08333	261.7688	19.08333	268.90331	19.08333	262.65384
19.16667	266.79442	19.16667	257.61883	19.16667	252.66499
19.25	261.48871	19.25	254.4306	19.25	250.7478
19.33333	255.05408	19.33333	255.47543	19.33333	259.43871
19.41667	259.09586	19.41667	260.97819	19.41667	258.88366
19.5	262.82229	19.5	256.6365	19.5	261.28583
19.58333	252.63296	19.58333	244.64774	19.58333	257.30212
19.66667	255.27346	19.66667	260.97116	19.66667	244.84656

19.75	264.90324	19.75	258.87272	19.75	272.98094
19.83333	254.53183	19.83333	254.94315	19.83333	262.58369
19.91667	263.98872	19.91667	264.87493	19.91667	264.16691
20	258.82377	20	256.06626	20	247.48677
20.08333	262.30204	20.08333	262.52684	20.08333	263.34155
20.16667	262.36599	20.16667	261.47263	20.16667	260.23479
20.25	255.83069	20.25	262.33621	20.25	251.6476
20.33333	257.79775	20.33333	251.17183	20.33333	265.63223
20.41667	261.58254	20.41667	264.23316	20.41667	268.44594
20.5	260.78787	20.5	254.7136	20.5	247.86062
20.58333	262.77968	20.58333	259.54881	20.58333	257.66547
20.66667	267.80903	20.66667	269.68852	20.66667	256.88323
20.75	258.84394	20.75	253.92591	20.75	265.50244
20.83333	256.31902	20.83333	251.73911	20.83333	261.99367
20.91667	254.0019	20.91667	257.2102	20.91667	241.00666
21	258.57969	21	249.54957	21	266.93259
21.08333	258.98865	21.08333	256.93746	21.08333	266.49104

21.16667	257.50331	21.16667	265.2006	21.16667	248.26821
21.25	262.54648	21.25	270.3512	21.25	272.82675
21.33333	265.44014	21.33333	256.18371	21.33333	269.23991
21.41667	262.41569	21.41667	255.83456	21.41667	267.30397
21.5	252.96372	21.5	247.54119	21.5	250.51124
21.58333	256.54619	21.58333	263.04399	21.58333	265.59149
21.66667	265.83611	21.66667	271.59412	21.66667	265.50781
21.75	257.031	21.75	262.56976	21.75	265.35906
21.83333	257.01232	21.83333	253.37997	21.83333	261.63212
21.91667	256.52072	21.91667	249.09239	21.91667	258.09575
22	259.18624	22	263.94542	22	245.35269
22.08333	266.67616	22.08333	269.14238	22.08333	252.8466
22.16667	253.88411	22.16667	254.5993	22.16667	261.90507
22.25	262.3074	22.25	269.94212	22.25	270.75449
22.33333	266.05579	22.33333	267.59306	22.33333	259.78645
22.41667	264.38913	22.41667	253.95845	22.41667	274.15989
22.5	257.05999	22.5	261.48065	22.5	257.288

22.58333	253.49974	22.58333	248.67234	22.58333	257.11921
22.66667	255.24309	22.66667	256.88609	22.66667	246.13576
22.75	253.91964	22.75	260.45173	22.75	252.31411
22.83333	253.65249	22.83333	245.89072	22.83333	256.5667
22.91667	267.13624	22.91667	258.60925	22.91667	266.59021
23	254.68179	23	246.40285	23	247.81964
23.08333	265.91858	23.08333	265.5798	23.08333	268.11188
23.16667	259.49435	23.16667	254.06157	23.16667	259.70635
23.25	262.0229	23.25	262.63551	23.25	263.61181
23.33333	256.25597	23.33333	258.87824	23.33333	265.16676
23.41667	254.61764	23.41667	248.06174	23.41667	259.87982
23.5	254.98435	23.5	256.10552	23.5	262.2537
23.58333	264.7818	23.58333	259.08343	23.58333	254.53581
23.66667	260.60582	23.66667	259.09352	23.66667	264.31815
23.75	267.42031	23.75	273.67099	23.75	277.18703
23.83333	259.95297	23.83333	264.95109	23.83333	260.05279
23.91667	266.77945	23.91667	257.83193	23.91667	273.1979

24	257.71434	24	255.04699	24	262.9462
24.08333	264.50384	24.08333	259.0466	24.08333	253.56132
24.16667	266.19434	24.16667	255.61258	24.16667	257.31064
24.25	260.16949	24.25	263.80614	24.25	265.09658
24.33333	266.08266	24.33333	267.3061	24.33333	257.75773
24.41667	252.76824	24.41667	247.29252	24.41667	260.28102
24.5	260.74926	24.5	263.84852	24.5	257.65886
24.58333	253.07868	24.58333	252.72893	24.58333	239.34739
24.66667	260.59223	24.66667	257.97015	24.66667	264.1527
24.75	260.19534	24.75	249.96367	24.75	257.37872
24.83333	254.67437	24.83333	245.82876	24.83333	247.1164
24.91667	263.05675	24.91667	268.79586	24.91667	258.84416
25	262.02386	25	268.12247	25	261.46418
25.08333	267.45943	25.08333	266.97559	25.08333	269.61114
25.16667	266.6789	25.16667	271.59166	25.16667	272.71065
25.25	257.80114	25.25	258.00119	25.25	245.74043
25.33333	262.29992	25.33333	254.52718	25.33333	263.49653

25.41667	267.65945	25.41667	259.34086	25.41667	277.24166
25.5	256.62028	25.5	251.89282	25.5	257.83461
25.58333	254.93393	25.58333	260.77931	25.58333	240.86719
25.66667	252.89312	25.66667	256.87088	25.66667	246.59406
25.75	264.84409	25.75	270.20692	25.75	267.79181
25.83333	266.14471	25.83333	272.24608	25.83333	265.23343
25.91667	265.27223	25.91667	258.56217	25.91667	250.79234
26	260.57624	26	254.70467	26	255.10804
26.08333	256.17922	26.08333	247.77552	26.08333	253.29977
26.16667	266.68506	26.16667	270.5808	26.16667	266.80027
26.25	263.74702	26.25	269.52018	26.25	264.66011
26.33333	255.5783	26.33333	252.62535	26.33333	261.68407
26.41667	253.45881	26.41667	254.33223	26.41667	262.39627
26.5	265.25933	26.5	257.5188	26.5	269.31674
26.58333	261.25763	26.58333	267.81311	26.58333	264.01939
26.66667	252.69509	26.66667	257.8809	26.66667	257.14555
26.75	255.33254	26.75	262.56713	26.75	245.32401

26.83333	265.68582	26.83333	270.13712	26.83333	253.76716
26.91667	260.67932	26.91667	266.3358	26.91667	259.99556
27	253.74528	27	244.03572	27	245.58281
27.08333	265.75787	27.08333	268.83003	27.08333	264.4405
27.16667	254.71977	27.16667	250.45398	27.16667	251.20464
27.25	256.16857	27.25	262.613	27.25	261.23635
27.33333	255.07518	27.33333	259.19618	27.33333	256.76046
27.41667	255.59836	27.41667	260.83404	27.41667	254.17749
27.5	264.52943	27.5	268.96083	27.5	274.37125
27.58333	252.83913	27.58333	247.44759	27.58333	262.10037
27.66667	265.19451	27.66667	269.20319	27.66667	264.77763
27.75	264.23161	27.75	255.66178	27.75	260.61349
27.83333	256.34376	27.83333	261.74031	27.83333	250.6701
27.91667	265.11833	27.91667	270.44773	27.91667	258.63168
28	260.26698	28	253.90866	28	250.22146
28.08333	266.98379	28.08333	271.5655	28.08333	269.61171
28.16667	262.88877	28.16667	260.84376	28.16667	258.94623

28.25	252.68682	28.25	247.9775	28.25	253.93636
28.33333	261.43043	28.33333	265.52809	28.33333	255.1561
28.41667	259.67106	28.41667	253.4213	28.41667	248.00845
28.5	256.29823	28.5	246.47099	28.5	257.42876
28.58333	266.94206	28.58333	259.87317	28.58333	259.48263
28.66667	255.04666	28.66667	250.70525	28.66667	239.96549
28.75	267.20318	28.75	272.68218	28.75	251.75242
28.83333	254.13522	28.83333	261.17019	28.83333	254.80512
28.91667	262.36005	28.91667	256.9919	28.91667	272.77129
29	266.58574	29	267.89307	29	252.95574
29.08333	259.54006	29.08333	256.41961	29.08333	251.23478
29.16667	254.48966	29.16667	261.78843	29.16667	242.3388
29.25	256.2187	29.25	255.58712	29.25	242.10976
29.33333	256.92079	29.33333	263.53573	29.33333	263.09665
29.41667	255.91513	29.41667	247.74478	29.41667	243.61201
29.5	256.11716	29.5	263.27	29.5	250.26206
29.58333	267.22024	29.58333	259.87169	29.58333	269.78529

29.66667	254.7223	29.66667	261.69583	29.66667	253.49148
29.75	253.5601	29.75	248.1296	29.75	240.09175
29.83333	258.0314	29.83333	249.66809	29.83333	250.26749
29.91667	265.19106	29.91667	262.65026	29.91667	275.69368
30	258.53312	30	261.37647	30	251.07936
30.08333	253.88975	30.08333	249.30882	30.08333	250.77173
30.16667	264.23107	30.16667	264.87447	30.16667	258.79663
30.25	255.32544	30.25	254.25307	30.25	251.21164
30.33333	265.57379	30.33333	262.11177	30.33333	271.06851
30.41667	259.2703	30.41667	259.3639	30.41667	251.65398
30.5	254.9655	30.5	249.31317	30.5	255.16462
30.58333	264.15279	30.58333	266.69262	30.58333	269.46358
30.66667	261.69249	30.66667	251.25567	30.66667	255.68743
30.75	261.42049	30.75	267.9011	30.75	262.25939
30.83333	253.0878	30.83333	252.50367	30.83333	240.05353
30.91667	261.54924	30.91667	264.25889	30.91667	251.47985
31	267.12931	31	270.31803	31	252.85205

31.08333	255.44277	31.08333	257.21657	31.08333	258.83199
31.16667	260.44647	31.16667	256.66896	31.16667	254.78671
31.25	254.04708	31.25	245.12952	31.25	261.70127
31.33333	265.09405	31.33333	266.81636	31.33333	258.92213
31.41667	261.48643	31.41667	257.07097	31.41667	263.68789
31.5	264.95608	31.5	260.17998	31.5	270.26713
31.58333	255.43125	31.58333	260.37665	31.58333	252.01869
31.66667	254.5865	31.66667	257.22987	31.66667	243.17721
31.75	259.32064	31.75	254.39952	31.75	257.19473
31.83333	265.31174	31.83333	260.44327	31.83333	249.48695
31.91667	258.38828	31.91667	255.43955	31.91667	247.14503
32	253.81124	32	250.80814	32	243.00395
32.08333	253.78482	32.08333	248.88576	32.08333	261.40903
32.16667	262.14345	32.16667	253.99341	32.16667	270.78632
32.25	263.56099	32.25	260.77542	32.25	248.5844
32.33333	260.82535	32.33333	267.56116	32.33333	252.53527
32.41667	266.59664	32.41667	268.57265	32.41667	252.04073

32.5	255.22407	32.5	261.14425	32.5	260.66239
32.58333	261.56498	32.58333	262.37217	32.58333	250.21201
32.66667	265.16122	32.66667	260.14066	32.66667	259.82751
32.75	260.74746	32.75	260.31879	32.75	258.52458
32.83333	258.25558	32.83333	247.93259	32.83333	261.48842
32.91667	261.12177	32.91667	255.92127	32.91667	262.80444
33	261.94027	33	259.34497	33	256.09691
33.08333	266.43301	33.08333	266.5926	33.08333	271.97935
33.16667	262.21014	33.16667	263.73856	33.16667	269.57458
33.25	266.41795	33.25	264.43287	33.25	266.08652
33.33333	256.71092	33.33333	254.38794	33.33333	265.96252
33.41667	266.4969	33.41667	259.82355	33.41667	252.6372
33.5	259.56554	33.5	257.78051	33.5	263.31782
33.58333	258.20897	33.58333	264.16921	33.58333	262.25743
33.66667	264.27227	33.66667	268.42716	33.66667	251.6908
33.75	259.98088	33.75	252.6697	33.75	247.31253
33.83333	252.75492	33.83333	244.14508	33.83333	254.06419

33.91667	261.68194	33.91667	260.65667	33.91667	257.08785
34	259.70053	34	260.8188	34	258.53577
34.08333	255.00021	34.08333	250.78327	34.08333	255.63796
34.16667	253.21413	34.16667	257.5922	34.16667	245.07254
34.25	258.80497	34.25	262.06074	34.25	247.65566
34.33333	264.43359	34.33333	266.31001	34.33333	252.67873
34.41667	256.36607	34.41667	250.14278	34.41667	258.24369
34.5	261.21618	34.5	254.40862	34.5	263.74527
34.58333	256.87787	34.58333	247.04202	34.58333	251.12869
34.66667	267.32809	34.66667	261.21671	34.66667	261.57867
34.75	265.14012	34.75	263.35308	34.75	275.10992
34.83333	260.3942	34.83333	265.4672	34.83333	262.30445
34.91667	266.36872	34.91667	257.07192	34.91667	253.59101
35	253.2079	35	250.4254	35	245.55469
35.08333	258.37734	35.08333	259.43256	35.08333	249.9669
35.16667	264.44668	35.16667	257.46793	35.16667	269.70176
35.25	262.5986	35.25	264.89502	35.25	255.9538

35.33333	263.84424	35.33333	262.42107	35.33333	254.23424
35.41667	259.06027	35.41667	253.12235	35.41667	265.91889
35.5	257.00954	35.5	258.53206	35.5	259.82508
35.58333	263.70034	35.58333	253.25464	35.58333	264.98324
35.66667	259.71518	35.66667	262.97928	35.66667	260.86702
35.75	264.62784	35.75	268.30696	35.75	256.07559
35.83333	255.1613	35.83333	246.85861	35.83333	259.46536
35.91667	261.32364	35.91667	258.64769	35.91667	268.3279
36	262.79016	36	255.51402	36	270.51619
36.08333	260.21928	36.08333	267.2603	36.08333	261.00254
36.16667	252.73665	36.16667	251.79066	36.16667	258.28649
36.25	254.112	36.25	244.84072	36.25	248.90423
36.33333	260.29675	36.33333	254.4255	36.33333	245.61263
36.41667	254.53575	36.41667	259.46967	36.41667	246.41631
36.5	258.8866	36.5	256.80308	36.5	253.0236
36.58333	260.27133	36.58333	264.46144	36.58333	255.9477
36.66667	252.69491	36.66667	254.39554	36.66667	254.1944

36.75	255.36345	36.75	262.8078	36.75	257.3706
36.83333	255.7579	36.83333	256.18809	36.83333	258.52265
36.91667	265.95377	36.91667	273.00235	36.91667	250.10053
37	260.93871	37	266.78374	37	251.94415
37.08333	268.08433	37.08333	268.85802	37.08333	270.49441
37.16667	254.70142	37.16667	257.33732	37.16667	250.16467
37.25	259.23877	37.25	258.02916	37.25	266.83732
37.33333	260.6123	37.33333	265.33981	37.33333	255.43706
37.41667	253.44477	37.41667	253.02684	37.41667	240.93955
37.5	255.76586	37.5	261.5986	37.5	247.1821
37.58333	264.09607	37.58333	267.28001	37.58333	268.57144
37.66667	263.40206	37.66667	261.61803	37.66667	253.15098
37.75	261.81544	37.75	256.09294	37.75	262.22413
37.83333	254.55229	37.83333	248.77574	37.83333	240.78534
37.91667	263.09558	37.91667	264.31529	37.91667	253.8775
38	259.13744	38	262.66352	38	253.21719
38.08333	258.2301	38.08333	257.32397	38.08333	248.67249

38.16667	253.79062	38.16667	254.7733	38.16667	255.28646
38.25	264.04333	38.25	258.55704	38.25	270.43397
38.33333	254.72121	38.33333	245.91397	38.33333	257.81174
38.41667	253.71385	38.41667	248.63982	38.41667	245.3862
38.5	255.29366	38.5	249.9376	38.5	257.98956
38.58333	263.78514	38.58333	259.13725	38.58333	258.66613
38.66667	260.36901	38.66667	259.79906	38.66667	262.76519
38.75	256.25848	38.75	248.49026	38.75	241.03365
38.83333	265.19119	38.83333	258.87646	38.83333	257.92257
38.91667	257.55737	38.91667	259.76618	38.91667	247.75911
39	267.59237	39	270.12085	39	257.17098
39.08333	267.2471	39.08333	257.75876	39.08333	259.36893
39.16667	259.20929	39.16667	256.23667	39.16667	256.7315
39.25	258.74108	39.25	258.2192	39.25	264.98191
39.33333	267.79753	39.33333	264.87961	39.33333	254.34981
39.41667	266.33904	39.41667	259.54153	39.41667	266.78862
39.5	264.73833	39.5	261.93475	39.5	252.217

39.58333	253.37045	39.58333	259.28386	39.58333	246.3792
39.66667	268.09358	39.66667	268.33112	39.66667	262.55129
39.75	261.13667	39.75	263.40517	39.75	250.92362
39.83333	261.01253	39.83333	266.22521	39.83333	270.59248
39.91667	257.65342	39.91667	261.15544	39.91667	260.08154
40	266.66588	40	263.09975	40	259.8467
40.08333	257.2538	40.08333	247.0699	40.08333	247.94893
40.16667	256.68036	40.16667	252.73338	40.16667	254.61074
40.25	253.87889	40.25	257.11407	40.25	255.7741
40.33333	267.83265	40.33333	273.11994	40.33333	264.52679
40.41667	263.81559	40.41667	270.87002	40.41667	271.31534
40.5	266.76547	40.5	263.91935	40.5	260.13341
40.58333	259.18497	40.58333	262.37968	40.58333	267.54757
40.66667	257.9502	40.66667	257.49337	40.66667	263.77007
40.75	266.15446	40.75	266.74745	40.75	256.76533
40.83333	261.51852	40.83333	255.0951	40.83333	270.28331
40.91667	267.31399	40.91667	260.72738	40.91667	267.15922

41	258.35978	41	255.90768	41	253.80593
41.08333	257.95016	41.08333	248.15631	41.08333	243.95043
41.16667	265.38397	41.16667	261.01283	41.16667	271.85961
41.25	263.80616	41.25	265.79526	41.25	272.20232
41.33333	261.60792	41.33333	258.54763	41.33333	246.18927
41.41667	254.31468	41.41667	247.08019	41.41667	263.29631
41.5	260.88557	41.5	258.98554	41.5	266.06311
41.58333	256.11678	41.58333	248.16025	41.58333	260.74583
41.66667	256.08431	41.66667	256.99546	41.66667	256.95039
41.75	260.85929	41.75	250.91742	41.75	259.7522
41.83333	266.25522	41.83333	262.9486	41.83333	276.67033
41.91667	254.93071	41.91667	254.80503	41.91667	252.7299
42	266.0163	42	255.88028	42	259.46086
42.08333	254.09583	42.08333	255.36428	42.08333	251.11402
42.16667	252.71492	42.16667	245.00687	42.16667	251.8289
42.25	253.77928	42.25	251.83	42.25	260.99474
42.33333	256.98209	42.33333	247.60738	42.33333	259.30932

42.41667	262.37308	42.41667	258.84075	42.41667	256.57332
42.5	259.66196	42.5	253.12263	42.5	252.63291
42.58333	258.28678	42.58333	253.86465	42.58333	253.5622
42.66667	261.50287	42.66667	264.97719	42.66667	256.45978
42.75	256.62595	42.75	253.17151	42.75	257.66015
42.83333	266.38396	42.83333	269.75132	42.83333	252.89162
42.91667	254.6799	42.91667	259.32399	42.91667	258.28133
43	268.18997	43	262.19834	43	259.47246
43.08333	256.07306	43.08333	247.2982	43.08333	247.24033
43.16667	259.4272	43.16667	249.40216	43.16667	248.14393
43.25	267.84148	43.25	267.24124	43.25	254.50404
43.33333	264.82846	43.33333	272.77173	43.33333	263.26306
43.41667	265.3435	43.41667	261.22988	43.41667	273.77346
43.5	264.78514	43.5	266.2441	43.5	262.34382
43.58333	267.98665	43.58333	271.9223	43.58333	252.42333
43.66667	262.29236	43.66667	263.76723	43.66667	257.55064
43.75	253.6097	43.75	256.85489	43.75	248.1122

43.83333	258.38575	43.83333	265.22599	43.83333	248.20122
43.91667	253.96488	43.91667	247.35037	43.91667	239.62882
44	259.48979	44	249.48049	44	248.75288
44.08333	268.0799	44.08333	260.21631	44.08333	261.91674
44.16667	257.0108	44.16667	249.00106	44.16667	255.3171
44.25	254.43796	44.25	256.18391	44.25	253.25075
44.33333	258.78737	44.33333	258.65228	44.33333	256.79445
44.41667	253.75126	44.41667	247.47295	44.41667	251.42512
44.5	268.19624	44.5	270.60008	44.5	257.8393
44.58333	260.11653	44.58333	263.67571	44.58333	248.98147
44.66667	262.98023	44.66667	255.54972	44.66667	251.81067
44.75	264.81845	44.75	265.48235	44.75	255.77649
44.83333	254.32131	44.83333	257.46345	44.83333	248.80635
44.91667	259.97126	44.91667	251.65659	44.91667	260.43894
45	266.51227	45	271.13653	45	250.74861
45.08333	263.47371	45.08333	270.72714	45.08333	269.87401
45.16667	262.56292	45.16667	254.04722	45.16667	265.21822

45.25	253.64708	45.25	243.957	45.25	256.44202
45.33333	267.14971	45.33333	262.29747	45.33333	252.85694
45.41667	253.10441	45.41667	254.98093	45.41667	260.54518
45.5	261.00067	45.5	268.06648	45.5	262.52048
45.58333	258.41167	45.58333	255.25026	45.58333	257.27233
45.66667	254.39762	45.66667	256.95457	45.66667	258.26294
45.75	266.61745	45.75	257.37116	45.75	252.54725
45.83333	258.89429	45.83333	261.05425	45.83333	243.50044
45.91667	255.52882	45.91667	256.52717	45.91667	249.70097
46	258.16851	46	249.68329	46	256.97577
46.08333	262.28143	46.08333	265.97278	46.08333	266.20359
46.16667	256.22919	46.16667	261.23104	46.16667	246.38486
46.25	265.23221	46.25	265.77037	46.25	275.55797
46.33333	254.26434	46.33333	246.2484	46.33333	246.83016
46.41667	259.602	46.41667	267.09645	46.41667	247.91706
46.5	257.60999	46.5	261.4185	46.5	263.04865
46.58333	264.00283	46.58333	259.85904	46.58333	266.1336

46.66667	255.12289	46.66667	252.56809	46.66667	246.89135
46.75	253.34003	46.75	249.77807	46.75	248.18963
46.83333	259.39921	46.83333	258.21038	46.83333	258.24462
46.91667	255.67739	46.91667	251.55741	46.91667	246.43491
47	264.40486	47	269.55282	47	256.92696
47.08333	255.10658	47.08333	259.58702	47.08333	243.8
47.16667	255.57472	47.16667	247.23992	47.16667	253.16005
47.25	256.38043	47.25	263.36808	47.25	249.21563
47.33333	258.13349	47.33333	259.29277	47.33333	260.51916
47.41667	261.41552	47.41667	266.12361	47.41667	258.54674
47.5	256.77891	47.5	259.22139	47.5	249.2974
47.58333	254.96244	47.58333	252.53622	47.58333	261.28551
47.66667	252.74953	47.66667	255.62229	47.66667	246.05774
47.75	265.69408	47.75	273.02272	47.75	260.90335
47.83333	260.64852	47.83333	255.1504	47.83333	257.67322
47.91667	256.4818	47.91667	260.73273	47.91667	254.60256
48	263.97204	48	263.35752	48	250.61823

48.08333	260.96339	48.08333	259.35716	48.08333	258.87229
48.16667	253.71865	48.16667	251.30578	48.16667	261.20411
48.25	254.43267	48.25	257.2752	48.25	264.0861
48.33333	261.85051	48.33333	256.29614	48.33333	261.15294
48.41667	263.98073	48.41667	269.16004	48.41667	253.20029
48.5	253.46652	48.5	258.06719	48.5	241.32421
48.58333	262.94106	48.58333	254.01842	48.58333	251.85047
48.66667	261.00269	48.66667	266.6701	48.66667	256.43383
48.75	256.42232	48.75	250.54256	48.75	248.42579
48.83333	254.95488	48.83333	253.05036	48.83333	258.2183
48.91667	257.11505	48.91667	257.81518	48.91667	263.78308
49	263.02658	49	259.48335	49	249.12931
49.08333	264.54079	49.08333	254.49062	49.08333	270.03636
49.16667	253.17688	49.16667	258.13079	49.16667	251.27223
49.25	253.55542	49.25	246.64071	49.25	241.93624
49.33333	262.59968	49.33333	255.99477	49.33333	269.10348
49.41667	260.78892	49.41667	264.92191	49.41667	252.40873

49.5	252.94532	49.5	248.85368	49.5	249.16379
49.58333	263.92804	49.58333	269.63469	49.58333	268.43936
49.66667	254.40801	49.66667	256.7188	49.66667	252.171
49.75	264.71559	49.75	259.2463	49.75	255.66787
49.83333	260.78352	49.83333	250.5376	49.83333	260.77127
49.91667	260.88752	49.91667	267.76556	49.91667	270.70367
50	252.69617	50	244.10273	50	259.80173
50.08333	252.9007	50.08333	255.53213	50.08333	242.62029
50.16667	255.83345	50.16667	254.34962	50.16667	265.40956
50.25	255.60769	50.25	258.94899	50.25	244.03173
50.33333	259.20022	50.33333	261.36273	50.33333	255.31844
50.41667	258.35452	50.41667	259.70133	50.41667	250.54938
50.5	258.75546	50.5	257.2953	50.5	245.15812
50.58333	259.67474	50.58333	263.701	50.58333	267.66311
50.66667	257.30708	50.66667	248.6909	50.66667	264.84618
50.75	263.43744	50.75	256.98638	50.75	262.64502
50.83333	261.38834	50.83333	263.59053	50.83333	247.02688

50.91667	253.47202	50.91667	248.76606	50.91667	246.43995
51	252.98265	51	253.16202	51	243.01665
51.08333	264.71194	51.08333	262.89284	51.08333	252.48172
51.16667	266.58482	51.16667	265.82905	51.16667	269.28719
51.25	254.93692	51.25	252.33274	51.25	257.22779
51.33333	252.74013	51.33333	255.82735	51.33333	250.5423
51.41667	263.44315	51.41667	259.00545	51.41667	266.97856
51.5	256.05819	51.5	258.41393	51.5	262.87088
51.58333	267.86199	51.58333	262.22725	51.58333	271.57376
51.66667	267.49921	51.66667	261.50669	51.66667	251.56937
51.75	255.34206	51.75	247.285	51.75	250.67466
51.83333	260.3925	51.83333	253.48715	51.83333	261.33304
51.91667	255.79828	51.91667	247.70712	51.91667	257.2929
52	261.93151	52	261.2793	52	250.50449
52.08333	255.07166	52.08333	258.47764	52.08333	241.69622
52.16667	265.96668	52.16667	258.77494	52.16667	270.11469
52.25	266.27124	52.25	259.6536	52.25	251.51715

52.33333	259.88623	52.33333	258.29937	52.33333	248.76908
52.41667	265.03592	52.41667	267.87737	52.41667	250.77645
52.5	255.37255	52.5	262.61542	52.5	257.75057
52.58333	259.01147	52.58333	258.1632	52.58333	256.38535
52.66667	262.60897	52.66667	257.3069	52.66667	263.18619
52.75	255.299	52.75	246.88358	52.75	250.18281
52.83333	264.0912	52.83333	257.11603	52.83333	258.55321
52.91667	256.31915	52.91667	250.14801	52.91667	265.5533
53	253.60477	53	246.64611	53	251.83993
53.08333	264.53497	53.08333	254.21546	53.08333	249.79958
53.16667	256.48628	53.16667	255.8166	53.16667	252.73722
53.25	258.63736	53.25	253.25822	53.25	263.68079
53.33333	254.55912	53.33333	261.73794	53.33333	256.33416
53.41667	262.38366	53.41667	262.05175	53.41667	250.83773
53.5	261.54264	53.5	263.84918	53.5	250.3698
53.58333	262.52443	53.58333	254.34417	53.58333	271.0402
53.66667	261.57609	53.66667	267.01478	53.66667	256.1

53.75	257.99354	53.75	256.53897	53.75	248.91449
53.83333	264.77149	53.83333	270.35552	53.83333	266.58782
53.91667	256.87411	53.91667	256.92138	53.91667	265.90401
54	261.76829	54	259.89874	54	271.56916
54.08333	252.91757	54.08333	250.59907	54.08333	246.48056
54.16667	268.10843	54.16667	260.84404	54.16667	270.08091
54.25	262.06436	54.25	252.52417	54.25	251.53016
54.33333	263.38634	54.33333	270.2012	54.33333	262.06045
54.41667	258.2904	54.41667	256.59628	54.41667	251.39224
54.5	267.67731	54.5	272.37451	54.5	269.55881
54.58333	261.93825	54.58333	258.80809	54.58333	265.81258
54.66667	254.94029	54.66667	246.0648	54.66667	244.89947
54.75	258.35574	54.75	259.40492	54.75	265.5419
54.83333	264.5656	54.83333	254.97589	54.83333	253.99647
54.91667	259.45168	54.91667	251.78332	54.91667	248.93351
55	265.96135	55	265.80151	55	268.49091
55.08333	266.78478	55.08333	261.78737	55.08333	257.62286

55.16667	263.08109	55.16667	270.86145	55.16667	249.59213
55.25	268.16829	55.25	259.66521	55.25	252.90093
55.33333	264.91835	55.33333	268.49766	55.33333	268.16175
55.41667	264.04971	55.41667	264.69452	55.41667	252.36208
55.5	255.64098	55.5	259.56558	55.5	256.19215
55.58333	258.60763	55.58333	252.34881	55.58333	245.26399
55.66667	260.27162	55.66667	259.38149	55.66667	259.09259
55.75	266.90008	55.75	264.64104	55.75	263.98287
55.83333	256.66279	55.83333	254.35026	55.83333	250.19694
55.91667	252.97914	55.91667	258.09236	55.91667	257.80548
56	262.58957	56	270.28397	56	249.69669
56.08333	261.93869	56.08333	257.0606	56.08333	265.34677
56.16667	263.46046	56.16667	264.37519	56.16667	257.03914
56.25	256.43408	56.25	257.11979	56.25	260.37522
56.33333	266.00571	56.33333	269.14617	56.33333	262.28775
56.41667	258.49249	56.41667	265.29886	56.41667	257.95302
56.5	260.01218	56.5	253.39357	56.5	256.25838

56.58333	264.83084	56.58333	258.14969	56.58333	263.44948
56.66667	257.79638	56.66667	259.40245	56.66667	248.20094
56.75	262.03912	56.75	254.43842	56.75	263.02203
56.83333	259.13587	56.83333	251.92334	56.83333	253.52195
56.91667	265.88234	56.91667	256.64426	56.91667	255.18084
57	267.57421	57	256.92128	57	260.02434
57.08333	257.01154	57.08333	254.83594	57.08333	263.86167
57.16667	259.6315	57.16667	260.03834	57.16667	259.81973
57.25	257.43961	57.25	252.3907	57.25	245.98329
57.33333	262.02098	57.33333	255.78567	57.33333	259.49326
57.41667	253.41972	57.41667	255.82391	57.41667	253.63437
57.5	258.43323	57.5	260.81314	57.5	257.27364
57.58333	268.19451	57.58333	265.99049	57.58333	260.02262
57.66667	252.89135	57.66667	254.94407	57.66667	256.80383
57.75	258.28125	57.75	264.65408	57.75	254.71258
57.83333	261.88843	57.83333	265.85552	57.83333	269.28914
57.91667	262.18934	57.91667	263.17359	57.91667	259.03048

58	262.00627	58	263.65245	58	262.86617
58.08333	256.99076	58.08333	263.50728	58.08333	256.0106
58.16667	259.75946	58.16667	257.09952	58.16667	248.49369
58.25	256.25292	58.25	255.77091	58.25	244.22031
58.33333	267.60731	58.33333	269.03473	58.33333	272.52594
58.41667	260.24331	58.41667	266.38219	58.41667	260.8031
58.5	257.06524	58.5	261.65745	58.5	259.59502
58.58333	265.99743	58.58333	256.68725	58.58333	257.55254
58.66667	267.30926	58.66667	259.72168	58.66667	265.62922
58.75	258.00806	58.75	253.24342	58.75	249.60344
58.83333	256.2384	58.83333	259.42267	58.83333	250.85047
58.91667	262.79865	58.91667	262.75766	58.91667	268.04622
59	260.65911	59	255.49884	59	259.18899
59.08333	266.80443	59.08333	258.45478	59.08333	259.12846
59.16667	263.07178	59.16667	265.23081	59.16667	254.31149
59.25	266.52867	59.25	268.92237	59.25	254.72891
59.33333	259.99403	59.33333	266.75049	59.33333	244.98639

59.41667	258.992	59.41667	257.70559	59.41667	265.19357
59.5	266.57466	59.5	265.12609	59.5	263.2694
59.58333	257.39534	59.58333	248.54892	59.58333	254.24663
59.66667	263.65788	59.66667	253.84717	59.66667	261.37592
59.75	262.30655	59.75	259.74696	59.75	256.92874
59.83333	258.49159	59.83333	253.98427	59.83333	250.48688
59.91667	255.00743	59.91667	249.27639	59.91667	250.51114
60	264.09489	60	255.21946	60	265.57884
60.08333	260.01814	60.08333	267.12548	60.08333	259.70144
60.16667	266.31403	60.16667	271.24536	60.16667	252.67103
60.25	265.61207	60.25	265.6822	60.25	267.55635
60.33333	253.92483	60.33333	260.6678	60.33333	241.56732
60.41667	255.9733	60.41667	263.64482	60.41667	260.74541
60.5	262.4945	60.5	264.34772	60.5	270.76886
60.58333	267.65548	60.58333	261.99884	60.58333	265.22275
60.66667	257.59337	60.66667	248.01502	60.66667	255.32242
60.75	265.99187	60.75	269.43354	60.75	270.69753

60.83333	257.78439	60.83333	255.96314	60.83333	260.53701
60.91667	256.93526	60.91667	258.37564	60.91667	266.74967
61	255.78475	61	261.95556	61	250.04392
61.08333	253.43733	61.08333	246.51951	61.08333	251.10546
61.16667	260.94864	61.16667	261.20254	61.16667	265.12512
61.25	257.89557	61.25	259.03934	61.25	246.29259
61.33333	256.64582	61.33333	255.21399	61.33333	260.84069
61.41667	258.02876	61.41667	249.35564	61.41667	242.92763
61.5	256.34192	61.5	252.33196	61.5	262.27931
61.58333	255.90279	61.58333	251.6374	61.58333	253.0267
61.66667	255.13285	61.66667	256.89556	61.66667	247.55974
61.75	265.8072	61.75	271.13424	61.75	255.25412
61.83333	262.33605	61.83333	257.8989	61.83333	270.68358
61.91667	265.17874	61.91667	267.44787	61.91667	258.85979
62	256.5292	62	251.44351	62	247.98729
62.08333	257.34038	62.08333	264.07344	62.08333	262.92596
62.16667	252.68742	62.16667	256.97048	62.16667	241.51485

62.25	257.1201	62.25	256.73622	62.25	242.83091
62.33333	256.0855	62.33333	253.99533	62.33333	255.18203
62.41667	258.82139	62.41667	254.16675	62.41667	260.96236
62.5	261.23689	62.5	256.69895	62.5	268.13381
62.58333	255.68188	62.58333	262.81872	62.58333	244.89133
62.66667	267.27731	62.66667	264.14803	62.66667	263.4483
62.75	261.69937	62.75	260.65833	62.75	267.13356
62.83333	253.45096	62.83333	260.84362	62.83333	255.31915
62.91667	256.35617	62.91667	257.90353	62.91667	245.95144
63	260.42	63	259.89448	63	258.55566
63.08333	253.93688	63.08333	251.12504	63.08333	256.12709
63.16667	266.23876	63.16667	259.08519	63.16667	274.84466
63.25	253.12712	63.25	249.41248	63.25	246.12284
63.33333	255.7919	63.33333	259.10466	63.33333	260.8333
63.41667	261.56712	63.41667	262.55558	63.41667	271.39105
63.5	260.52965	63.5	263.96838	63.5	249.39566
63.58333	266.89122	63.58333	260.0185	63.58333	263.32315

63.66667	260.01814	63.66667	259.61381	63.66667	259.27605
63.75	266.71235	63.75	273.36335	63.75	273.87384
63.83333	268.09165	63.83333	265.58981	63.83333	267.22625
63.91667	260.03285	63.91667	262.34142	63.91667	264.52622
64	257.59476	64	249.48053	64	250.01349
64.08333	255.64404	64.08333	262.83275	64.08333	260.40516
64.16667	263.72532	64.16667	264.41655	64.16667	261.82149
64.25	259.83712	64.25	253.79617	64.25	256.59877
64.33333	261.75875	64.33333	254.19026	64.33333	257.2599
64.41667	258.42851	64.41667	258.05611	64.41667	244.13224
64.5	259.21625	64.5	258.86838	64.5	263.24162
64.58333	259.07641	64.58333	250.40382	64.58333	258.04554
64.66667	257.66332	64.66667	265.25357	64.66667	258.3469
64.75	262.33436	64.75	268.60546	64.75	253.58918
64.83333	255.34665	64.83333	253.38074	64.83333	256.61649
64.91667	267.70691	64.91667	259.19999	64.91667	254.85912
65	253.67494	65	258.30451	65	251.25463

65.08333	258.23996	65.08333	256.91932	65.08333	252.18165
65.16667	266.38013	65.16667	269.08708	65.16667	257.55655
65.25	265.94412	65.25	264.77955	65.25	254.0878
65.33333	265.68419	65.33333	260.14202	65.33333	263.57758
65.41667	266.58472	65.41667	271.49815	65.41667	257.40328
65.5	261.11512	65.5	268.58745	65.5	265.6781
65.58333	259.33917	65.58333	253.39019	65.58333	260.2326
65.66667	255.80366	65.66667	255.44272	65.66667	257.51089
65.75	255.89929	65.75	252.53447	65.75	258.85135
65.83333	253.1632	65.83333	259.37355	65.83333	245.30299
65.91667	265.72379	65.91667	264.5485	65.91667	261.95291
66	258.86059	66	264.43981	66	267.82959
66.08333	255.32403	66.08333	260.55357	66.08333	265.09962
66.16667	267.36262	66.16667	261.8381	66.16667	257.52795
66.25	257.47388	66.25	261.41323	66.25	253.39112
66.33333	267.2473	66.33333	264.31987	66.33333	276.68754
66.41667	267.35908	66.41667	274.1492	66.41667	277.43932

66.5	258.2333	66.5	257.0821	66.5	243.00064
66.58333	257.19635	66.58333	261.68134	66.58333	265.18692
66.66667	265.22036	66.66667	259.86264	66.66667	268.87271
66.75	262.1597	66.75	257.15219	66.75	265.75312
66.83333	262.85132	66.83333	263.13678	66.83333	263.90562
66.91667	255.24624	66.91667	262.88398	66.91667	242.02806
67	264.28224	67	262.76922	67	269.87815
67.08333	255.90638	67.08333	248.33207	67.08333	246.22596
67.16667	257.58316	67.16667	256.99098	67.16667	267.4115
67.25	266.45375	67.25	262.23286	67.25	256.18436
67.33333	257.01381	67.33333	256.66273	67.33333	255.82846
67.41667	258.81849	67.41667	258.3112	67.41667	252.96013
67.5	267.67033	67.5	265.49524	67.5	251.95647
67.58333	257.46273	67.58333	252.96331	67.58333	244.11895
67.66667	260.22287	67.66667	253.25046	67.66667	268.94918
67.75	256.23487	67.75	258.49615	67.75	247.24949
67.83333	264.61081	67.83333	264.61769	67.83333	252.17437

67.91667	255.36727	67.91667	249.32758	67.91667	242.98553
68	253.08806	68	256.70418	68	261.20788
68.08333	263.80836	68.08333	254.06196	68.08333	248.15055
68.16667	262.4906	68.16667	265.67435	68.16667	256.60688
68.25	261.39347	68.25	263.84169	68.25	247.69201
68.33333	253.22234	68.33333	257.47622	68.33333	262.44191
68.41667	255.95513	68.41667	252.63437	68.41667	258.63575
68.5	258.52173	68.5	260.19126	68.5	251.12568
68.58333	258.13234	68.58333	262.63726	68.58333	259.8151
68.66667	263.104	68.66667	270.64377	68.66667	254.9633
68.75	263.89435	68.75	262.48858	68.75	260.88833
68.83333	259.68102	68.83333	249.96662	68.83333	249.15122
68.91667	264.26144	68.91667	262.98241	68.91667	249.851
69	266.00985	69	266.35913	69	261.39352
69.08333	256.27241	69.08333	261.62312	69.08333	260.5519
69.16667	253.00152	69.16667	258.36338	69.16667	248.68431
69.25	257.13833	69.25	254.77806	69.25	264.71697

69.33333	267.41505	69.33333	266.56387	69.33333	261.08293
69.41667	255.84743	69.41667	253.79681	69.41667	261.54439
69.5	266.23512	69.5	269.04949	69.5	258.0199
69.58333	254.83681	69.58333	251.9569	69.58333	252.60419
69.66667	268.05104	69.66667	269.61512	69.66667	252.01328
69.75	256.16874	69.75	248.6899	69.75	246.01191
69.83333	257.72075	69.83333	255.88166	69.83333	256.64245
69.91667	262.5179	69.91667	269.82744	69.91667	271.0093
70	262.19467	70	257.92063	70	247.14023
70.08333	266.2984	70.08333	268.55901	70.08333	275.14909
70.16667	262.40104	70.16667	263.84136	70.16667	260.76602
70.25	255.86573	70.25	260.88684	70.25	258.55949
70.33333	257.49745	70.33333	262.56088	70.33333	242.97665
70.41667	253.67328	70.41667	258.78581	70.41667	263.50211
70.5	262.05212	70.5	258.54088	70.5	258.53381
70.58333	253.15472	70.58333	248.63996	70.58333	260.59215
70.66667	253.93308	70.66667	256.55113	70.66667	241.73363

70.75	257.51767	70.75	260.90609	70.75	254.0762
70.83333	265.77278	70.83333	271.37181	70.83333	256.07579
70.91667	254.31661	70.91667	244.78305	70.91667	251.58983
71	264.11276	71	254.81309	71	264.33039
71.08333	256.17212	71.08333	257.24318	71.08333	254.50649
71.16667	263.06723	71.16667	269.50317	71.16667	273.38526
71.25	265.44134	71.25	273.3568	71.25	272.31203
71.33333	261.52808	71.33333	264.73808	71.33333	251.13836
71.41667	255.16599	71.41667	252.71078	71.41667	262.58877
71.5	255.3072	71.5	246.85424	71.5	258.18554
71.58333	265.3503	71.58333	266.50776	71.58333	270.74487
71.66667	266.00728	71.66667	271.61498	71.66667	265.87135
71.75	254.59226	71.75	252.31544	71.75	258.28945
71.83333	257.30109	71.83333	259.50874	71.83333	256.63674
71.91667	254.9333	71.91667	260.85795	71.91667	242.15196
72	264.63621	72	254.90262	72	267.58902
72.08333	257.86749	72.08333	261.92374	72.08333	251.87026

72.16667	265.57975	72.16667	260.41051	72.16667	254.35157
72.25	262.29661	72.25	258.68714	72.25	254.63151
72.33333	254.89594	72.33333	247.29749	72.33333	259.59699
72.41667	254.27836	72.41667	253.5618	72.41667	251.1459
72.5	256.93692	72.5	256.838	72.5	256.17998
72.58333	256.69756	72.58333	260.67021	72.58333	258.45748
72.66667	263.61327	72.66667	256.20547	72.66667	265.89958
72.75	266.01681	72.75	256.84668	72.75	271.43664
72.83333	262.60759	72.83333	268.11158	72.83333	255.09517
72.91667	264.26041	72.91667	265.15361	72.91667	266.9186
73	254.02329	73	248.14468	73	255.51746
73.08333	263.63478	73.08333	269.93512	73.08333	265.90125
73.16667	254.03012	73.16667	246.41379	73.16667	239.92332
73.25	262.36705	73.25	260.34158	73.25	271.78498
73.33333	262.67967	73.33333	256.8424	73.33333	263.22157
73.41667	261.64061	73.41667	255.85129	73.41667	247.64153
73.5	263.60993	73.5	253.23899	73.5	264.02643

73.58333	260.91756	73.58333	265.17678	73.58333	257.66522
73.66667	255.1978	73.66667	261.08905	73.66667	262.45155
73.75	258.65528	73.75	260.57787	73.75	258.76237
73.83333	255.8384	73.83333	248.43393	73.83333	262.13612
73.91667	257.10414	73.91667	254.76989	73.91667	263.24353
74	262.06125	74	257.91806	74	256.50031
74.08333	262.47702	74.08333	262.77362	74.08333	259.84595
74.16667	260.18059	74.16667	261.4102	74.16667	252.89397
74.25	260.44137	74.25	257.75934	74.25	264.77068
74.33333	259.67217	74.33333	253.83137	74.33333	245.64962
74.41667	267.28418	74.41667	272.40828	74.41667	275.34199
74.5	261.81188	74.5	254.99037	74.5	271.46331
74.58333	267.03886	74.58333	263.54839	74.58333	275.4869
74.66667	268.16029	74.66667	266.5044	74.66667	255.78174
74.75	261.09172	74.75	254.98322	74.75	260.23978
74.83333	260.81303	74.83333	260.82215	74.83333	247.51234
74.91667	258.00838	74.91667	258.06953	74.91667	264.82986

75	256.25064	75	263.80696	75	248.93852
75.08333	259.89489	75.08333	254.87008	75.08333	266.78445
75.16667	263.50398	75.16667	271.00225	75.16667	248.01785
75.25	258.15932	75.25	259.72789	75.25	261.85151
75.33333	258.09474	75.33333	252.72999	75.33333	252.4897
75.41667	252.7407	75.41667	252.64339	75.41667	250.98693
75.5	254.32892	75.5	256.36508	75.5	262.7673
75.58333	267.75608	75.58333	271.00315	75.58333	265.84617
75.66667	254.78145	75.66667	245.46485	75.66667	245.43505
75.75	258.60883	75.75	259.2419	75.75	265.60394
75.83333	266.78845	75.83333	265.39341	75.83333	263.64408
75.91667	258.11109	75.91667	264.12276	75.91667	261.80853
76	262.02235	76	256.79081	76	258.8828
76.08333	265.35194	76.08333	269.57635	76.08333	258.25511
76.16667	261.40427	76.16667	262.05647	76.16667	249.17055
76.25	260.12712	76.25	256.13729	76.25	269.0742
76.33333	261.36525	76.33333	262.55786	76.33333	257.32716

76.41667	256.22089	76.41667	257.10793	76.41667	246.58186
76.5	253.51809	76.5	255.40528	76.5	242.15744
76.58333	265.08511	76.58333	267.85923	76.58333	255.11473
76.66667	261.83737	76.66667	263.44584	76.66667	255.95231
76.75	261.34898	76.75	266.23203	76.75	256.41759
76.83333	267.30456	76.83333	268.36763	76.83333	275.70781
76.91667	263.42148	76.91667	269.54287	76.91667	258.50472
77	268.21659	77	269.62312	77	277.12969
77.08333	256.3649	77.08333	251.6542	77.08333	261.41093
77.16667	264.77715	77.16667	262.35656	77.16667	264.08052
77.25	261.18634	77.25	261.33522	77.25	264.1239
77.33333	267.38574	77.33333	270.39784	77.33333	277.06163
77.41667	254.64708	77.41667	246.06777	77.41667	256.56789
77.5	253.15295	77.5	248.25646	77.5	255.66979
77.58333	267.32357	77.58333	270.61806	77.58333	254.85453
77.66667	260.76917	77.66667	253.54456	77.66667	271.04244
77.75	256.07597	77.75	248.20189	77.75	254.38689

77.83333	254.03194	77.83333	253.46266	77.83333	253.98012
77.91667	264.58255	77.91667	271.99192	77.91667	265.34905
78	263.94568	78	263.19608	78	270.31153
78.08333	259.24909	78.08333	265.45655	78.08333	255.06818
78.16667	256.30976	78.16667	260.95743	78.16667	244.00587
78.25	261.14915	78.25	255.40074	78.25	247.197
78.33333	266.22976	78.33333	270.94948	78.33333	253.84262
78.41667	265.57231	78.41667	263.90691	78.41667	266.94187
78.5	262.07293	78.5	266.38508	78.5	251.00008
78.58333	261.12061	78.58333	264.32168	78.58333	270.6925
78.66667	253.75113	78.66667	249.61753	78.66667	262.90114
78.75	266.84126	78.75	258.31889	78.75	275.23929
78.83333	256.61839	78.83333	263.6505	78.83333	242.37273
78.91667	257.60697	78.91667	249.84089	78.91667	264.78622
79	261.48047	79	268.71172	79	262.49083
79.08333	254.8065	79.08333	259.95614	79.08333	246.54822
79.16667	257.90843	79.16667	260.66677	79.16667	253.43811

79.25	258.57401	79.25	265.96819	79.25	250.45427
79.33333	258.86865	79.33333	266.04164	79.33333	244.61068
79.41667	267.98711	79.41667	272.36093	79.41667	268.48074
79.5	264.64896	79.5	260.83908	79.5	266.47107
79.58333	259.77132	79.58333	263.75829	79.58333	270.09464
79.66667	256.67647	79.66667	246.65942	79.66667	262.01868
79.75	260.83652	79.75	260.20007	79.75	249.60594
79.83333	264.69622	79.83333	262.53497	79.83333	256.25876
79.91667	266.94791	79.91667	268.84271	79.91667	272.49055
80	256.87663	80	258.69121	80	251.35558
80.08333	253.62366	80.08333	253.85674	80.08333	240.1078
80.16667	253.86802	80.16667	258.32823	80.16667	239.25259
80.25	263.82527	80.25	270.63723	80.25	265.82823
80.33333	254.74488	80.33333	246.48707	80.33333	244.61928
80.41667	261.6906	80.41667	255.50633	80.41667	260.11025
80.5	258.28368	80.5	248.40485	80.5	246.80194
80.58333	252.8439	80.58333	258.38017	80.58333	259.8229

80.66667	259.12928	80.66667	258.94763	80.66667	257.70822
80.75	267.65801	80.75	274.1	80.75	273.87436
80.83333	263.97809	80.83333	257.50957	80.83333	249.26131
80.91667	262.16927	80.91667	252.8426	80.91667	246.57466
81	262.08177	81	266.71276	81	251.92453
81.08333	264.92453	81.08333	271.19185	81.08333	250.81412
81.16667	256.79153	81.16667	251.95178	81.16667	265.63569
81.25	255.15125	81.25	252.23768	81.25	246.51974
81.33333	262.34627	81.33333	254.41922	81.33333	267.99249
81.41667	263.60967	81.41667	270.52626	81.41667	270.371
81.5	261.02277	81.5	256.14321	81.5	246.98888
81.58333	259.91024	81.58333	258.47658	81.58333	265.94198
81.66667	257.32985	81.66667	248.78727	81.66667	247.12852
81.75	266.38972	81.75	272.27907	81.75	265.40621
81.83333	266.2991	81.83333	258.17591	81.83333	253.31861
81.91667	255.6719	81.91667	253.56389	81.91667	249.32792
82	257.18538	82	258.9687	82	250.64206

82.08333	259.09036	82.08333	262.20463	82.08333	254.85735
82.16667	261.43975	82.16667	268.29418	82.16667	256.41488
82.25	264.05275	82.25	261.23769	82.25	273.34556
82.33333	257.72755	82.33333	260.80971	82.33333	246.99036
82.41667	255.11434	82.41667	247.66933	82.41667	245.41183
82.5	259.97537	82.5	257.12656	82.5	254.30583
82.58333	256.43377	82.58333	247.95401	82.58333	264.87377
82.66667	264.10497	82.66667	262.58742	82.66667	256.58564
82.75	258.5279	82.75	255.5724	82.75	268.04819
82.83333	257.90352	82.83333	264.76556	82.83333	243.98885
82.91667	265.07198	82.91667	255.07612	82.91667	274.31213
83	261.57597	83	257.89742	83	247.05536
83.08333	260.01565	83.08333	257.68513	83.08333	246.53696
83.16667	264.20358	83.16667	271.21528	83.16667	267.86042
83.25	266.34249	83.25	271.63791	83.25	276.56498
83.33333	254.04397	83.33333	245.64909	83.33333	256.56053
83.41667	264.16744	83.41667	266.28025	83.41667	273.01943

83.5	262.27995	83.5	261.78503	83.5	269.95479
83.58333	256.10635	83.58333	263.39232	83.58333	259.46467
83.66667	261.8145	83.66667	257.9153	83.66667	271.48855
83.75	265.56611	83.75	262.3448	83.75	265.01081
83.83333	264.14334	83.83333	257.08727	83.83333	251.86278
83.91667	254.28743	83.91667	246.29035	83.91667	247.07559
84	257.7538	84	262.74443	84	259.12119
84.08333	254.03324	84.08333	251.95779	84.08333	252.97112
84.16667	254.26301	84.16667	255.88877	84.16667	239.43668
84.25	253.07363	84.25	254.3185	84.25	254.74139
84.33333	263.0864	84.33333	263.55996	84.33333	258.26535
84.41667	261.33358	84.41667	251.27093	84.41667	252.90139
84.5	262.2297	84.5	266.18307	84.5	269.9993
84.58333	253.72052	84.58333	247.89764	84.58333	252.14974
84.66667	261.29067	84.66667	253.14232	84.66667	271.11233
84.75	266.98398	84.75	266.85583	84.75	272.7204
84.83333	263.86385	84.83333	254.57663	84.83333	264.97392

84.91667	262.34312	84.91667	265.90076	84.91667	252.60259
85	266.64828	85	259.84902	85	263.0344
85.08333	266.56859	85.08333	259.93557	85.08333	265.13605
85.16667	257.97371	85.16667	263.35995	85.16667	266.91044
85.25	262.75479	85.25	258.2877	85.25	247.40991
85.33333	257.1704	85.33333	249.5399	85.33333	263.37772
85.41667	255.28056	85.41667	261.16146	85.41667	261.23345
85.5	256.19647	85.5	245.99934	85.5	242.31575
85.58333	253.59497	85.58333	258.68918	85.58333	258.97017
85.66667	263.31366	85.66667	255.44795	85.66667	251.75392
85.75	266.17622	85.75	257.9511	85.75	251.79844
85.83333	258.18437	85.83333	252.38709	85.83333	246.88183
85.91667	266.89652	85.91667	259.4808	85.91667	257.64055
86	264.10173	86	265.7587	86	265.4122
86.08333	254.19917	86.08333	244.49004	86.08333	261.62027
86.16667	267.47826	86.16667	257.05731	86.16667	270.28652
86.25	254.79366	86.25	258.69175	86.25	263.89285

86.33333	259.48331	86.33333	253.42567	86.33333	250.6357
86.41667	264.03437	86.41667	259.45707	86.41667	264.27121
86.5	254.79268	86.5	247.70868	86.5	244.94112
86.58333	263.72548	86.58333	254.1438	86.58333	263.6308
86.66667	252.6843	86.66667	255.6963	86.66667	240.08976
86.75	262.40639	86.75	261.57351	86.75	263.44395
86.83333	267.43129	86.83333	270.69315	86.83333	274.93381
86.91667	258.43368	86.91667	256.71173	86.91667	260.23625
87	260.87476	87	264.64727	87	245.86325
87.08333	265.48809	87.08333	264.40676	87.08333	273.61628
87.16667	258.70231	87.16667	250.32915	87.16667	252.71387
87.25	263.25312	87.25	262.00767	87.25	254.30462
87.33333	255.9203	87.33333	262.62004	87.33333	260.6085
87.41667	254.77598	87.41667	245.35844	87.41667	239.99031
87.5	261.2263	87.5	265.09924	87.5	248.75326
87.58333	266.79042	87.58333	272.31005	87.58333	276.96607
87.66667	264.0795	87.66667	263.15575	87.66667	249.54695

87.75	253.96203	87.75	251.94633	87.75	256.10877
87.83333	264.47576	87.83333	271.74408	87.83333	254.39526
87.91667	262.16521	87.91667	252.79491	87.91667	249.25856
88	255.88165	88	254.22584	88	254.53111
88.08333	267.00025	88.08333	263.82641	88.08333	267.43439
88.16667	254.49509	88.16667	256.53793	88.16667	249.19803
88.25	256.55066	88.25	255.09319	88.25	254.05006
88.33333	266.42176	88.33333	272.73036	88.33333	263.19885
88.41667	257.2707	88.41667	248.30327	88.41667	261.6708
88.5	263.02941	88.5	253.99567	88.5	263.88899
88.58333	256.54032	88.58333	257.20245	88.58333	250.58474
88.66667	264.39001	88.66667	255.03007	88.66667	273.30735
88.75	256.7636	88.75	251.43601	88.75	250.19122
88.83333	267.78035	88.83333	268.93582	88.83333	266.75556
88.91667	256.53571	88.91667	256.12141	88.91667	261.14258
89	266.24974	89	261.6604	89	266.04979
89.08333	254.75841	89.08333	262.30538	89.08333	241.4427

89.16667	257.13907	89.16667	256.4034	89.16667	252.38766
89.25	266.62674	89.25	264.42973	89.25	250.82004
89.33333	257.3139	89.33333	257.92631	89.33333	262.88012
89.41667	265.42383	89.41667	256.64944	89.41667	259.92557
89.5	252.92856	89.5	255.23653	89.5	243.35976
89.58333	261.87153	89.58333	267.02909	89.58333	257.93534
89.66667	254.20162	89.66667	255.616	89.66667	239.25177
89.75	253.45715	89.75	256.96171	89.75	248.82548
89.83333	262.3733	89.83333	265.11747	89.83333	256.6268
89.91667	264.7313	89.91667	258.12678	89.91667	252.66511
90	257.83895	90	255.67543	90	257.92301
90.08333	265.94263	90.08333	259.55868	90.08333	261.55085
90.16667	253.89514	90.16667	249.763	90.16667	253.70091
90.25	267.58846	90.25	265.37952	90.25	258.79176
90.33333	259.14097	90.33333	256.32126	90.33333	261.59271
90.41667	253.81653	90.41667	245.35327	90.41667	252.19261
90.5	254.55947	90.5	251.98155	90.5	251.67302

90.58333	268.2304	90.58333	269.98945	90.58333	259.11968
90.66667	267.72428	90.66667	264.02995	90.66667	276.12547
90.75	256.88573	90.75	249.35512	90.75	255.73514
90.83333	261.56107	90.83333	267.99782	90.83333	265.1748
90.91667	263.14723	90.91667	253.85787	90.91667	273.50944
91	255.02248	91	259.67001	91	245.46909
91.08333	264.32391	91.08333	255.47593	91.08333	254.70992
91.16667	266.52223	91.16667	257.66303	91.16667	264.52944
91.25	258.34877	91.25	261.37559	91.25	255.62216
91.33333	253.76178	91.33333	258.03106	91.33333	262.67693
91.41667	265.02159	91.41667	264.74226	91.41667	251.74056
91.5	252.84827	91.5	253.11452	91.5	250.24671
91.58333	263.30785	91.58333	263.12643	91.58333	266.89489
91.66667	263.55586	91.66667	259.09517	91.66667	272.3602
91.75	255.89843	91.75	247.85196	91.75	244.6018
91.83333	256.2199	91.83333	252.31306	91.83333	264.6872
91.91667	258.08713	91.91667	259.78379	91.91667	264.40691

92	260.64701	92	263.91031	92	263.21699
92.08333	262.90863	92.08333	268.36819	92.08333	258.48887
92.16667	256.24212	92.16667	258.926	92.16667	262.5221
92.25	255.97148	92.25	263.08442	92.25	246.85992
92.33333	259.10601	92.33333	259.63174	92.33333	258.89173
92.41667	263.65111	92.41667	259.59484	92.41667	268.32459
92.5	263.58314	92.5	263.70281	92.5	258.95647
92.58333	268.02378	92.58333	261.29424	92.58333	277.67934
92.66667	262.88923	92.66667	264.4592	92.66667	256.49918
92.75	259.0191	92.75	252.72416	92.75	252.38485
92.83333	253.02622	92.83333	244.82184	92.83333	258.37039
92.91667	257.64478	92.91667	262.58537	92.91667	252.45994
93	258.34214	93	254.65534	93	255.75432
93.08333	256.06909	93.08333	259.49581	93.08333	241.54255
93.16667	266.49066	93.16667	266.54049	93.16667	275.30857
93.25	257.63417	93.25	261.88642	93.25	265.22536
93.33333	266.07573	93.33333	271.17401	93.33333	250.49567

93.41667	253.72317	93.41667	260.88273	93.41667	256.01226
93.5	258.25472	93.5	262.71995	93.5	255.71505
93.58333	259.08806	93.58333	259.85237	93.58333	249.08026
93.66667	253.33509	93.66667	254.59897	93.66667	242.24458
93.75	261.62999	93.75	251.64566	93.75	268.34498
93.83333	264.58921	93.83333	271.21346	93.83333	267.99474
93.91667	260.87564	93.91667	265.58757	93.91667	271.11944
94	254.24714	94	248.83702	94	250.53666
94.08333	260.59356	94.08333	253.46085	94.08333	270.35044
94.16667	266.72325	94.16667	269.17417	94.16667	276.04522
94.25	266.81678	94.25	261.91509	94.25	271.67125
94.33333	254.29671	94.33333	250.17405	94.33333	260.24929
94.41667	267.43653	94.41667	256.85327	94.41667	254.67286
94.5	253.34646	94.5	258.63887	94.5	261.54957
94.58333	263.50025	94.58333	263.40592	94.58333	250.72971
94.66667	265.5725	94.66667	262.40023	94.66667	255.10496
94.75	259.36287	94.75	251.56409	94.75	248.39131

94.83333	259.6325	94.83333	260.75463	94.83333	269.38326
94.91667	257.39123	94.91667	247.64795	94.91667	259.33016
95	265.02423	95	268.26495	95	251.52999
95.08333	254.45655	95.08333	248.11015	95.08333	258.72811
95.16667	259.85712	95.16667	257.09952	95.16667	257.38562
95.25	264.9253	95.25	260.6502	95.25	259.62785
95.33333	263.7768	95.33333	260.0586	95.33333	270.58726
95.41667	257.88654	95.41667	260.59744	95.41667	247.05427
95.5	259.14865	95.5	262.87469	95.5	252.66967
95.58333	263.7568	95.58333	263.68611	95.58333	252.72306
95.66667	267.67073	95.66667	258.55574	95.66667	265.99485
95.75	254.8964	95.75	245.63933	95.75	258.50013
95.83333	260.77733	95.83333	253.21974	95.83333	255.28405
95.91667	257.75145	95.91667	258.58888	95.91667	256.43949
96	263.19552	96	265.08474	96	252.92985
96.08333	265.55874	96.08333	259.99449	96.08333	267.43491
96.16667	257.40478	96.16667	259.0357	96.16667	259.79736

96.25	262.81552	96.25	261.23757	96.25	256.87746
96.33333	253.28563	96.33333	250.99162	96.33333	239.939
96.41667	263.65669	96.41667	258.15206	96.41667	261.2495
96.5	258.90321	96.5	262.22908	96.5	256.36519
96.58333	257.64218	96.58333	249.38913	96.58333	250.01262
96.66667	267.43729	96.66667	264.78805	96.66667	268.44766
96.75	267.13357	96.75	261.74468	96.75	259.00176
96.83333	254.65359	96.83333	256.56196	96.83333	241.39046
96.91667	254.23864	96.91667	252.72948	96.91667	254.75118
97	267.56578	97	269.3582	97	252.77046
97.08333	253.46396	97.08333	244.13116	97.08333	251.75004
97.16667	256.28825	97.16667	253.12771	97.16667	258.5828
97.25	257.21719	97.25	257.71954	97.25	241.89271
97.33333	262.37837	97.33333	252.0244	97.33333	260.83664
97.41667	261.82302	97.41667	256.8743	97.41667	262.34117
97.5	254.68107	97.5	248.25954	97.5	254.58786
97.58333	265.70103	97.58333	257.62531	97.58333	254.62395

97.66667	259.37677	97.66667	253.64091	97.66667	258.25497
97.75	254.03197	97.75	249.70555	97.75	239.64563
97.83333	253.32917	97.83333	243.33306	97.83333	257.8587
97.91667	263.43792	97.91667	266.67584	97.91667	263.62523
98	264.40464	98	257.08036	98	270.22921
98.08333	265.16425	98.08333	261.61503	98.08333	268.83625
98.16667	268.26233	98.16667	270.74563	98.16667	277.4597
98.25	263.29707	98.25	261.98532	98.25	263.6978
98.33333	261.0412	98.33333	265.82739	98.33333	263.16425
98.41667	265.62383	98.41667	269.9891	98.41667	253.98738
98.5	256.01526	98.5	247.06625	98.5	254.77077
98.58333	260.45045	98.58333	265.74385	98.58333	259.41334
98.66667	266.10189	98.66667	256.24574	98.66667	273.25897
98.75	260.05271	98.75	249.99179	98.75	263.57565
98.83333	262.41489	98.83333	268.83907	98.83333	270.71901
98.91667	255.49644	98.91667	260.69528	98.91667	259.23026
99	256.97033	99	257.04819	99	243.41566

99.08333	256.29853	99.08333	256.3339	99.08333	248.75592
99.16667	264.6599	99.16667	267.21783	99.16667	256.98873
99.25	267.94032	99.25	265.05701	99.25	275.00724
99.33333	265.35206	99.33333	256.87725	99.33333	263.11886
99.41667	266.53264	99.41667	256.26047	99.41667	270.47759
99.5	258.21585	99.5	253.7575	99.5	244.33391
99.58333	264.73005	99.58333	268.99035	99.58333	250.82272
99.66667	267.88935	99.66667	268.76508	99.66667	262.291
99.75	254.38403	99.75	259.0245	99.75	239.51961
99.83333	261.65028	99.83333	268.03036	99.83333	261.90879
99.91667	267.62916	99.91667	258.575	99.91667	255.32331
100	258.47488	100	263.41537	100	247.91024