Electronic Supplementary Material (ESI) for RSC Advances.

A Theoretical Study on the On-off Phosphorescence of Novel Pt(II)/Pt(IV)-Bisphenylpyridinylmethane Complexes

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Content

Results of DFT methods screening

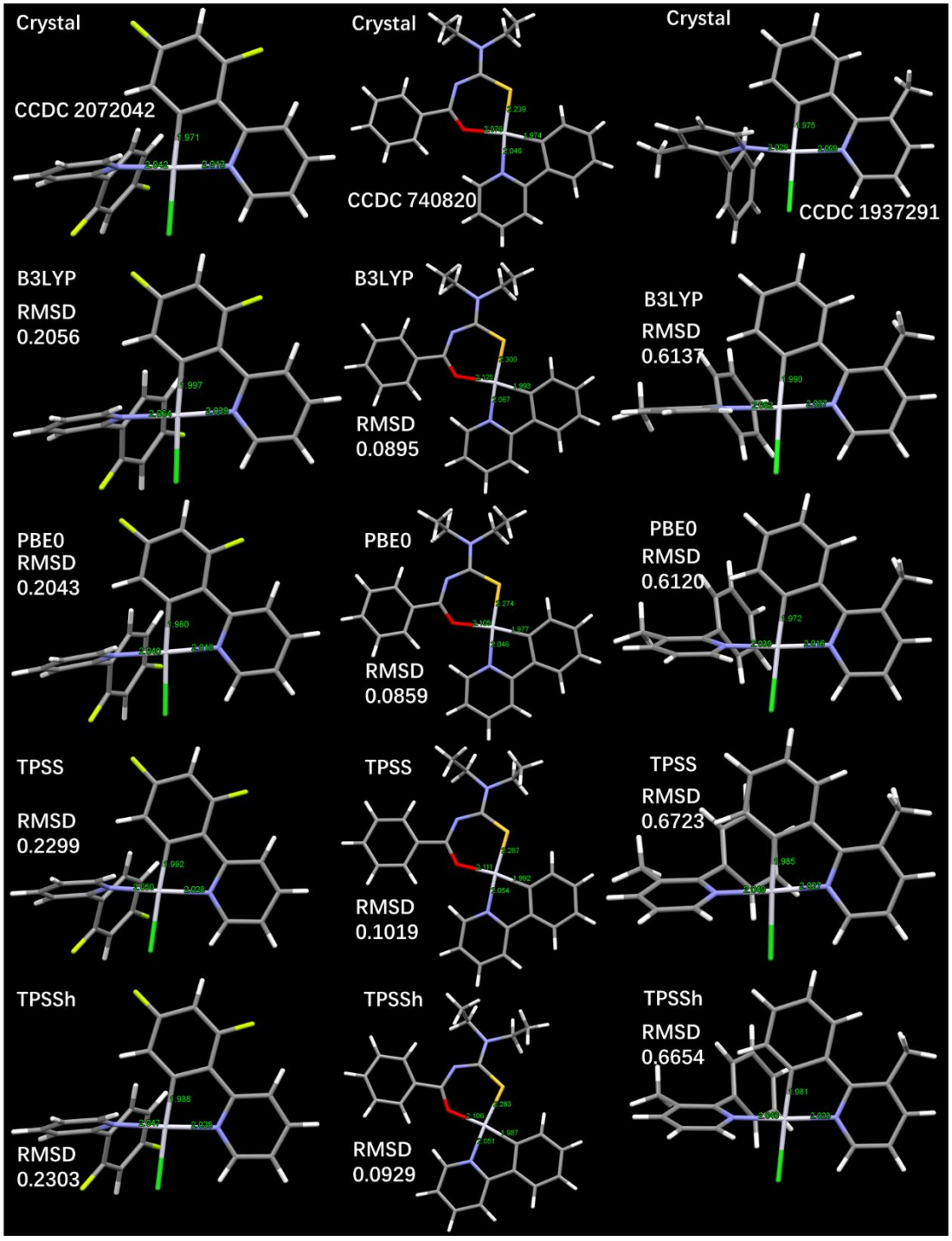

Figure S1 Bond distances and RMSD results of the DFT screening

Table S1 Bond lengths of the structures optimized by DFT methods

	CCDC 740820			CCDC 2072042			CCDC 1937291		
Bond	**Pt-C**	**Pt-N**	**Pt-O**	**Pt-C**	**Pt-N1(PhPy)**	**Pt-N2(Py)**	**Pt-C**	**Pt-N1(PhPy)**	**Pt-N2(Py)**
Crystal	1.974	2.046	2.076	1.971	2.013	2.042	1.975	2.009	2.029
B3LYP	1.993	2.067	2.215	1.997	2.039	2.064	1.99	2.027	2.063
PBE0	1.977	2.046	2.105	1.98	2.018	2.040	1.972	2.016	2.039
TPSS	1.992	2.054	2.111	1.992	2.028	2.050	1.995	2.027	2.049
TPSSh	1.987	2.051	2.106	1.988	2.025	2.047	1.981	2.023	2.046

Previous studies have revealed that the Hartree-Fock ratio (HF%) of the DFT functionals was vital in DFT studies involving transition metal complexes (*Theor. Chem. Acc.* 2001, **107**, 48–55). In order to pick out the optimal density functional theory (DFT) methods, some Pt complexes crystal structures were selected to perform geometric optimization tasks. The complexes crystal structures including CCDC 2072042 (*Inorg. Chem. Commun.,* 2021, **130**, 108737), CCDC 740820 (*Polyhedron*, 2009, **28**, 3739-3746), and CCDC 1937291 (*Inorg. Chem. Comm.*, 2019, **108**, 107510) were obtained from the CCDC database and used to construct the ORCA input directly. DFT methods with moderate HF ratios (0-25%), including TPSS (0%), TPSSh (10%), B3LYP (20%), and PBE0 (25%) were tested in geometric optimization tasks, using def2-SVP basis set and combining D3 version of Grimme's dispersion. The bond distances errors to the crystal structures and the RMSD values were chosen as standards. As shown in Figure S1, the structures optimized at PBE0-D3/def2-SVP had the minimal RMSD values than those optimized at other levels. And the bond distances of the structures optimized at PBE0-D3/def2-SVP were the most closely to those of crystal structures (Table S1). Hence, the DFT method PBE0 was selected for the geometric optimization tasks in this work.

Details of IGMH analysis

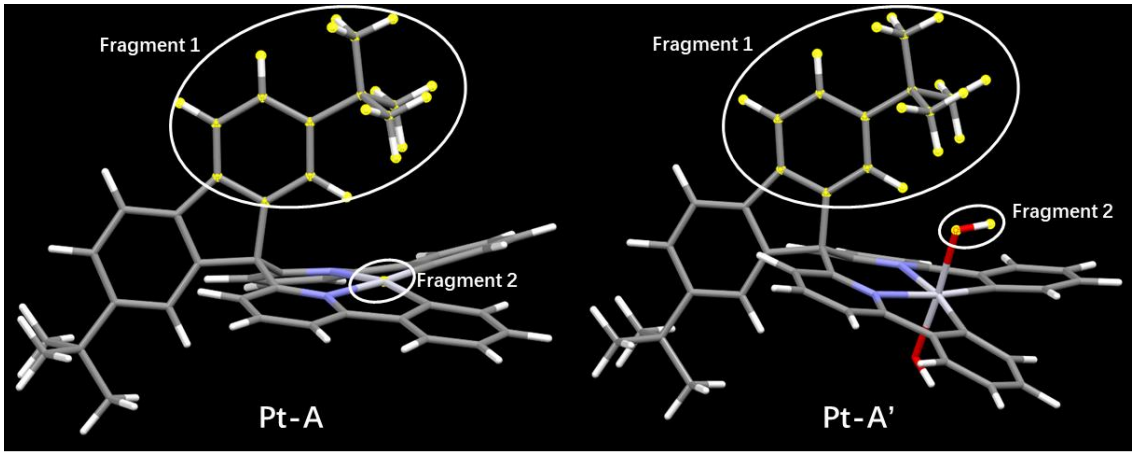

Figure S2 Fragments setting in the IGMH analysis

The wavefunctions generated at PBE0-D3/def2-SVP level were applied for the IGMH analysis. As shown in Figure S2, two fragments were defined, and the defined fragments were highlighted, which were tert-butyl benzene of linkage and Pt/hydroxyl in Pt-A/Pt-A'. The IGMH analysis was performed by Multiwfn, and the visualizations was carried out by VMD program.

Summary of the oscillatory strengths

Oscillatory strengths (OS) were extracted from the result of TD-DFT calculations by Multiwfn. The corresponded keywords of the calculations were listed as followed:

```
! PBE0 ZORA ZORA-def2-SVP SARC/J RI-SOMF(1X) TightSCF NoAutoStart MiniPrint NoPop
%maxcore 4000
%pal nprocs 8 end
%tddft nroots 50
      dosoc false
      tda true
      printlevel 3
      tprint 1e-8
end
%basis NEWGTO Pt "SARC-ZORA-SVP" end
end
```

The results of OS were summarized as followed:

Pt-A

Index	Excit.energy(eV	nm	1000 cm^-1)	Oscil.str.
1	2.91364	425.53015	23.50010	0.00293
2	3.18386	389.41421	25.67960	0.05012
3	3.20409	386.95651	25.84270	0.01536
4	3.39117	365.60936	27.35160	0.09433
5	3.50726	353.50683	28.28800	0.01780
6	3.62279	342.23373	29.21980	0.01866
7	3.63054	341.50327	29.28230	0.02747
8	3.78384	327.66799	30.51870	0.02030
9	3.80806	325.58340	30.71410	0.00170
10	3.83169	323.57541	30.90470	0.00742
11	3.87348	320.08505	31.24170	0.01069
12	3.93029	315.45844	31.69990	0.00114
13	3.96917	312.36825	32.01350	0.02012
14	4.00654	309.45480	32.31490	0.01837
15	4.03454	307.30655	32.54080	0.00856
16	4.10742	301.85402	33.12860	0.00327
17	4.12786	300.35986	33.29340	0.01778
18	4.21140	294.40169	33.96720	0.00771
19	4.27263	290.18229	34.46110	0.28259
20	4.31284	287.47696	34.78540	0.02734
21	4.36743	283.88367	35.22570	0.12851

22	4.36822	283.83210	35.23210	0.04875
23	4.42653	280.09325	35.70240	0.03001
24	4.46684	277.56578	36.02750	0.03282
25	4.47216	277.23566	36.07040	0.00516
26	4.49005	276.13099	36.21470	0.03257
27	4.59991	269.53600	37.10080	0.01525
28	4.62799	267.90047	37.32730	0.00095
29	4.65008	266.62830	37.50540	0.03843
30	4.68514	264.63290	37.78820	0.00462
31	4.71905	262.73133	38.06170	0.01052
32	4.73807	261.67670	38.21510	0.22054
33	4.74952	261.04552	38.30750	0.01904
34	4.77663	259.56432	38.52610	0.03104
35	4.78708	258.99760	38.61040	0.01199
36	4.79370	258.63989	38.66380	0.09320
37	4.82170	257.13818	38.88960	0.01293
38	4.85715	255.26096	39.17560	0.03608
39	4.88402	253.85675	39.39230	0.10060
40	4.92310	251.84162	39.70750	0.06297
41	4.96549	249.69166	40.04940	0.03472
42	5.00430	247.75536	40.36240	0.04002
43	5.00787	247.57871	40.39120	0.05071
44	5.03073	246.45356	40.57560	0.03266
45	5.03932	246.03335	40.64490	0.01434
46	5.06653	244.71240	40.86430	0.12821
47	5.08421	243.86143	41.00690	0.06439
48	5.10567	242.83635	41.18000	0.10600
49	5.12124	242.09795	41.30560	0.01618
50	5.14241	241.10157	41.47630	0.11687

Pt-A'

Index	Excit.energy(eV	nm	1000 cm^-1)	Oscil.str.
1	3.30092	375.60523	26.62370	0.01690
2	3.49599	354.64644	28.19710	0.02034
3	3.51030	353.20092	28.31250	0.00219
4	3.69980	335.11057	29.84090	0.01155
5	3.79707	326.52638	30.62540	0.00492
6	3.83980	322.89211	30.97010	0.00120
7	3.94784	314.05559	31.84150	0.03720
8	3.97447	311.95119	32.05630	0.00643
9	4.02176	308.28330	32.43770	0.01160
10	4.12591	300.50157	33.27770	0.03578
11	4.16825	297.44911	33.61920	0.00947
12	4.19900	295.27097	33.86720	0.08408

13	4.25481	291.39740	34.31740	0.07620
14	4.31803	287.13110	34.82730	0.02106
15	4.33578	285.95615	34.97040	0.01171
16	4.34137	285.58784	35.01550	0.02082
17	4.35798	284.49910	35.14950	0.05355
18	4.41518	280.81372	35.61080	0.00138
19	4.47595	277.00067	36.10100	0.09248
20	4.49262	275.97325	36.23540	0.10185
21	4.51591	274.54956	36.42330	0.05200
22	4.54233	272.95261	36.63640	0.06644
23	4.61146	268.86132	37.19390	0.00869
24	4.64355	267.00276	37.45280	0.05027
25	4.66073	266.01903	37.59130	0.02129
26	4.67372	265.27946	37.69610	0.02446
27	4.68368	264.71557	37.77640	0.02313
28	4.71269	263.08592	38.01040	0.00263
29	4.72738	262.26828	38.12890	0.03558
30	4.75066	260.98284	38.31670	0.19035
31	4.78828	258.93255	38.62010	0.03803
32	4.81328	257.58792	38.82170	0.02512
33	4.85538	255.35417	39.16130	0.00974
34	4.87042	254.56566	39.28260	0.09828
35	4.88443	253.83548	39.39560	0.02242
36	4.89535	253.26910	39.48370	0.04192
37	4.94623	250.66429	39.89400	0.10373
38	4.95922	250.00753	39.99880	0.03266
39	5.02649	246.66146	40.54140	0.11328
40	5.03094	246.44323	40.57730	0.08844
41	5.06080	244.98938	40.81810	0.03262
42	5.06944	244.57176	40.88780	0.03826
43	5.08305	243.91674	40.99760	0.09425
44	5.09016	243.57631	41.05490	0.00384
45	5.10484	242.87587	41.17330	0.03418
46	5.13545	241.42812	41.42020	0.01881
47	5.15225	240.64090	41.55570	0.02014
48	5.22194	237.42933	42.11780	0.02466
49	5.23534	236.82150	42.22590	0.00712
50	5.25126	236.10356	42.35430	0.00151

Pt-B

Index	Excit.energy(eV	nm	1000 cm^-1)	Oscil.str.
1	2.80063	442.70123	22.58860	0.00553
2	3.01326	411.46172	24.30360	0.01220
3	3.09168	401.02506	24.93610	0.08487

4	3.19176	388.45063	25.74330	0.04156
5	3.29747	375.99784	26.59590	0.00480
6	3.46082	358.25091	27.91340	0.01239
7	3.46647	357.66662	27.95900	0.00428
8	3.51457	352.77230	28.34690	0.00439
9	3.54225	350.01509	28.57020	0.00649
10	3.63682	340.91416	29.33290	0.06802
11	3.70465	334.67206	29.88000	0.00990
12	3.80269	326.04305	30.67080	0.01044
13	3.83908	322.95260	30.96430	0.00063
14	3.87107	320.28393	31.22230	0.00231
15	3.87495	319.96317	31.25360	0.02165
16	3.88051	319.50518	31.29840	0.00574
17	3.92213	316.11461	31.63410	0.00533
18	3.99777	310.13333	32.24420	0.02723
19	4.12405	300.63708	33.26270	0.06707
20	4.14050	299.44247	33.39540	0.01379
21	4.15614	298.31604	33.52150	0.21550
22	4.16953	297.35801	33.62950	0.00832
23	4.26724	290.54905	34.41760	0.01408
24	4.28719	289.19708	34.57850	0.01575
25	4.29315	288.79535	34.62660	0.04817
26	4.35261	284.85000	35.10620	0.05880
27	4.36547	284.01106	35.20990	0.01993
28	4.37791	283.20432	35.31020	0.06459
29	4.40081	281.73065	35.49490	0.39237
30	4.44493	278.93383	35.85080	0.04510
31	4.57513	270.99613	36.90090	0.02625
32	4.58702	270.29368	36.99680	0.04116
33	4.59959	269.55489	37.09820	0.01485
34	4.61982	268.37427	37.26140	0.04519
35	4.66425	265.81820	37.61970	0.11343
36	4.67759	265.06008	37.72730	0.00843
37	4.68674	264.54259	37.80110	0.03226
38	4.70606	263.45674	37.95690	0.01926
39	4.71278	263.08108	38.01110	0.00904
40	4.74070	261.53161	38.23630	0.02472
41	4.76495	260.20054	38.43190	0.01795
42	4.77958	259.40407	38.54990	0.01198
43	4.79348	258.65193	38.66200	0.14929
44	4.81490	257.50103	38.83480	0.32532
45	4.83062	256.66300	38.96160	0.06553
46	4.83434	256.46552	38.99160	0.00684
47	4.84336	255.98823	39.06430	0.03903

48	4.85558	255.34373	39.16290	0.07157
49	4.87725	254.20909	39.33770	0.00462
50	4.88918	253.58894	39.43390	0.02066

Pt-C

Index	Excit.energy(eV	nm	1000 cm^-1)	Oscil.str.
1	2.82512	438.86409	22.78610	0.00417
2	3.06072	405.08138	24.68640	0.01437
3	3.11515	398.00366	25.12540	0.07926
4	3.24710	381.83100	26.18960	0.05534
5	3.36605	368.33773	27.14900	0.00771
6	3.52082	352.14619	28.39730	0.01517
7	3.62300	342.21382	29.22150	0.05180
8	3.62718	341.81961	29.25520	0.01326
9	3.71888	333.39116	29.99480	0.01060
10	3.80793	325.59506	30.71300	0.01550
11	3.82149	324.43940	30.82240	0.00226
12	3.86996	320.37628	31.21330	0.01607
13	3.88219	319.36641	31.31200	0.00265
14	3.94034	314.65344	31.78100	0.00398
15	3.96360	312.80698	31.96860	0.00472
16	4.03659	307.15081	32.55730	0.03927
17	4.10958	301.69556	33.14600	0.00186
18	4.20475	294.86699	33.91360	0.33872
19	4.21753	293.97329	34.01670	0.03705
20	4.23558	292.72037	34.16230	0.02982
21	4.25334	291.49848	34.30550	0.00982
22	4.32355	286.76469	34.87180	0.00659
23	4.33526	285.99050	34.96620	0.00361
24	4.41585	280.77114	35.61620	0.07298
25	4.43773	279.38661	35.79270	0.29176
26	4.44980	278.62840	35.89010	0.03941
27	4.52039	274.27772	36.45940	0.00186
28	4.53674	273.28904	36.59130	0.00175
29	4.55184	272.38237	36.71310	0.00688
30	4.59789	269.65447	37.08450	0.07485
31	4.65949	266.08981	37.58130	0.00993
32	4.69123	264.28950	37.83730	0.08307
33	4.69393	264.13732	37.85910	0.04822
34	4.70447	263.54561	37.94410	0.05053
35	4.74070	261.53161	38.23630	0.01206
36	4.75916	260.51710	38.38520	0.03257
37	4.77148	259.84423	38.48460	0.02433
38	4.79224	258.71885	38.65200	0.07790

39	4.80420	258.07453	38.74850	0.04065
40	4.81092	257.71405	38.80270	0.00637
41	4.82877	256.76119	38.94670	0.03561
42	4.85149	255.55908	39.12990	0.40925
43	4.87314	254.42382	39.30450	0.04284
44	4.88457	253.82839	39.39670	0.05160
45	4.93471	251.24936	39.80110	0.02634
46	4.97103	249.41328	40.09410	0.02559
47	4.98770	248.58001	40.22850	0.04493
48	4.99943	247.99683	40.32310	0.06252
49	5.00471	247.73511	40.36570	0.06008
50	5.02720	246.62679	40.54710	0.01329

Pt-C'

Index	Excit.energy(eV	nm	1000 cm^-1)	Oscil.str.
1	3.04298	407.44322	24.54330	0.01627
2	3.26346	379.91616	26.32160	0.00577
3	3.34483	370.67381	26.97790	0.01863
4	3.52352	351.87606	28.41910	0.00623
5	3.54341	349.90119	28.57950	0.00331
6	3.71631	333.62140	29.97410	0.02688
7	3.75927	329.80881	30.32060	0.00200
8	3.87911	319.62058	31.28710	0.00003
9	3.95612	313.39811	31.90830	0.00796
10	4.03685	307.13100	32.55940	0.13094
11	4.07211	304.47150	32.84380	0.03954
12	4.07950	303.91999	32.90340	0.02798
13	4.12849	300.31386	33.29850	0.03292
14	4.18612	296.17961	33.76330	0.00466
15	4.21029	294.47885	33.95830	0.03465
16	4.22984	293.11763	34.11600	0.02296
17	4.29863	288.42718	34.67080	0.04924
18	4.32034	286.97784	34.84590	0.02050
19	4.36336	284.14825	35.19290	0.10277
20	4.38547	282.71591	35.37120	0.21123
21	4.43350	279.65304	35.75860	0.20297
22	4.46524	277.66520	36.01460	0.03049
23	4.49701	275.70390	36.27080	0.08758
24	4.51129	274.83101	36.38600	0.01194
25	4.56092	271.84036	36.78630	0.00795
26	4.56909	271.35425	36.85220	0.01724
27	4.59849	269.61957	37.08930	0.00342
28	4.61487	268.66268	37.22140	0.04149
29	4.62731	267.93995	37.32180	0.03409

30	4.64675	266.81896	37.47860	0.01148
31	4.69454	264.10313	37.86400	0.03139
32	4.69934	263.83348	37.90270	0.04755
33	4.72310	262.50580	38.09440	0.06392
34	4.75161	260.93108	38.32430	0.03324
35	4.78749	258.97547	38.61370	0.07563
36	4.79394	258.62718	38.66570	0.20826
37	4.83599	256.37807	39.00490	0.05222
38	4.84554	255.87295	39.08190	0.14087
39	4.86452	254.87450	39.23500	0.06120
40	4.91452	252.28128	39.63830	0.00564
41	4.93044	251.46671	39.76670	0.14381
42	4.95764	250.08693	39.98610	0.09282
43	4.98509	248.70984	40.20750	0.03164
44	4.98764	248.58310	40.22800	0.00545
45	5.00416	247.76212	40.36130	0.01280
46	5.01440	247.25610	40.44390	0.03039
47	5.04106	245.94864	40.65890	0.05423
48	5.06968	244.56039	40.88970	0.01381
49	5.07557	244.27663	40.93720	0.00151
50	5.10762	242.74381	41.19570	0.00764

Summary of the spin orbit coupling (SOC) matrix elements

SOC were extracted from the output files of TD-DFT calculations, and the corresponded keywords of the SOC calculations were listed as followed:

```
! PBE0 ZORA ZORA-def2-SVP SARC/J RI-SOMF(1X) TightSCF NoAutoStart MiniPrint NoPop
%maxcore   4000
%pal nprocs    8 end
%tddft   nroots 20
      dosoc true
      tda false
      printlevel 3
end
%basis   NEWGTO    Pt   "SARC-ZORA-SVP"    end
end
```

The results of SOC were summarized as followed:

Pt-A

T	S	MS= 0	-1	+1
1	0	(0.00 , -39.35)	(-25.70 , 45.05)	(-25.70 , -45.05)
1	1	(0.00 , 102.50)	(-51.16 , -19.19)	(-51.16 , 19.19)
1	2	(0.00 , 199.69)	(441.41 , 126.83)	(441.41 , -126.83)
1	3	(0.00 , 1457.46)	(-604.97 , -141.09)	(-604.97 , 141.09)
1	4	(0.00 , -366.65)	(-101.10 , 55.79)	(-101.10 , -55.79)
1	5	(0.00 , 101.40)	(-13.64 , 51.33)	(-13.64 , -51.33)
1	6	(0.00 , 75.13)	(-28.09 , 6.06)	(-28.09 , -6.06)
1	7	(0.00 , 44.32)	(-1.14 , 56.21)	(-1.14 , -56.21)
1	8	(0.00 , -135.78)	(101.77 , -28.90)	(101.77 , 28.90)
1	9	(0.00 , 49.75)	(-51.96 , -3.94)	(-51.96 , 3.94)
1	10	(0.00 , -58.53)	(-23.43 , -4.69)	(-23.43 , 4.69)
1	11	(0.00 , -58.50)	(52.18 , 91.96)	(52.18 , -91.96)
1	12	(0.00 , -71.01)	(76.58 , 15.76)	(76.58 , -15.76)
1	13	(0.00 , 373.58)	(-531.54 , -13.05)	(-531.54 , 13.05)
1	14	(0.00 , -185.94)	(276.95 , 20.55)	(276.95 , -20.55)
1	15	(0.00 , -418.36)	(379.43 , 23.24)	(379.43 , -23.24)
1	16	(0.00 , 457.59)	(-262.81 , 13.64)	(-262.81 , -13.64)
1	17	(0.00 , -269.17)	(159.54 , -6.33)	(159.54 , 6.33)
1	18	(0.00 , 58.03)	(33.33 , 20.25)	(33.33 , -20.25)
1	19	(0.00 , 53.66)	(-41.13 , -4.64)	(-41.13 , 4.64)
1	20	(0.00 , -7.64)	(1.50 , -4.80)	(1.50 , 4.80)

2	0	(0.00 , -203.95)	(-79.67 , -10.17)	(-79.67 , 10.17)
2	1	(0.00 , -411.29)	(-101.68 , -104.57)	(-101.68 , 104.57)
2	2	(0.00 , 13.01)	(-61.62 , 150.11)	(-61.62 , -150.11)
2	3	(0.00 , -51.82)	(127.02 , -567.26)	(127.02 , 567.26)
2	4	(0.00 , 150.19)	(-63.74 , -35.89)	(-63.74 , 35.89)
2	5	(0.00 , 609.36)	(-326.33 , -81.54)	(-326.33 , 81.54)
2	6	(0.00 , 362.61)	(130.92 , 71.11)	(130.92 , -71.11)
2	7	(0.00 , 21.11)	(75.35 , 15.58)	(75.35 , -15.58)
2	8	(0.00 , -15.28)	(-67.63 , -37.24)	(-67.63 , 37.24)
2	9	(0.00 , -72.64)	(-61.04 , 31.33)	(-61.04 , -31.33)
2	10	(0.00 , 8.70)	(3.92 , -5.39)	(3.92 , 5.39)
2	11	(0.00 , -218.92)	(79.22 , -17.60)	(79.22 , 17.60)
2	12	(0.00 , 38.20)	(-7.82 , -2.62)	(-7.82 , 2.62)
2	13	(0.00 , -118.18)	(16.67 , 164.12)	(16.67 , -164.12)
2	14	(0.00 , 49.43)	(-25.96 , -5.94)	(-25.96 , 5.94)
2	15	(0.00 , 56.04)	(7.11 , -94.39)	(7.11 , 94.39)
2	16	(0.00 , -81.34)	(1.57 , 80.10)	(1.57 , -80.10)
2	17	(0.00 , 76.52)	(0.98 , -44.63)	(0.98 , 44.63)
2	18	(0.00 , 168.89)	(-1.68 , 38.23)	(-1.68 , -38.23)
2	19	(0.00 , -2.84)	(22.62 , 6.99)	(22.62 , -6.99)
2	20	(0.00 , -14.76)	(-0.75 , -0.23)	(-0.75 , 0.23)
3	0	(0.00 , -10.35)	(6.91 , -0.69)	(6.91 , 0.69)
3	1	(0.00 , -14.66)	(-4.86 , -1.88)	(-4.86 , 1.88)
3	2	(0.00 , 2.43)	(0.71 , 6.77)	(0.71 , -6.77)
3	3	(0.00 , -38.82)	(24.70 , -19.08)	(24.70 , 19.08)
3	4	(0.00 , 21.98)	(24.69 , 18.95)	(24.69 , -18.95)
3	5	(0.00 , -18.91)	(-7.81 , 56.49)	(-7.81 , -56.49)
3	6	(0.00 , -18.39)	(-12.57 , 10.21)	(-12.57 , -10.21)
3	7	(0.00 , 14.87)	(26.73 , 16.11)	(26.73 , -16.11)
3	8	(0.00 , 4.27)	(-4.70 , -10.30)	(-4.70 , 10.30)
3	9	(0.00 , -4.85)	(-5.17 , -11.52)	(-5.17 , 11.52)
3	10	(0.00 , -1.02)	(-2.05 , 10.19)	(-2.05 , -10.19)
3	11	(0.00 , -24.15)	(-6.51 , 62.67)	(-6.51 , -62.67)
3	12	(0.00 , 11.59)	(8.20 , -0.08)	(8.20 , 0.08)
3	13	(0.00 , -20.55)	(10.03 , 15.53)	(10.03 , -15.53)
3	14	(0.00 , 3.64)	(-4.55 , 0.03)	(-4.55 , -0.03)
3	15	(0.00 , 6.56)	(-22.68 , -11.09)	(-22.68 , 11.09)
3	16	(0.00 , -12.13)	(2.43 , -1.64)	(2.43 , 1.64)
3	17	(0.00 , 12.17)	(-4.54 , -2.77)	(-4.54 , 2.77)
3	18	(0.00 , 2.92)	(4.46 , -12.08)	(4.46 , 12.08)
3	19	(0.00 , -1.86)	(-0.94 , -4.72)	(-0.94 , 4.72)
3	20	(0.00 , -2.89)	(-0.64 , 6.03)	(-0.64 , -6.03)
4	0	(0.00 , -39.69)	(127.85 , 142.48)	(127.85 , -142.48)
4	1	(0.00 , 155.41)	(-758.60 , -227.64)	(-758.60 , 227.64)

4	2	(0.00 , -7.20)	(125.83 , -208.46)	(125.83 , 208.46)
4	3	(0.00 , 132.91)	(229.26 , -1191.22)	(229.26 , 1191.22)
4	4	(0.00 , -191.17)	(66.57 , 328.43)	(66.57 , -328.43)
4	5	(0.00 , -683.34)	(349.00 , 50.59)	(349.00 , -50.59)
4	6	(0.00 , -438.59)	(-92.65 , 70.23)	(-92.65 , -70.23)
4	7	(0.00 , -100.65)	(-81.32 , 39.47)	(-81.32 , -39.47)
4	8	(0.00 , 93.44)	(80.76 , -84.12)	(80.76 , 84.12)
4	9	(0.00 , -4.31)	(-80.03 , 77.81)	(-80.03 , -77.81)
4	10	(0.00 , -21.20)	(-9.30 , 49.56)	(-9.30 , -49.56)
4	11	(0.00 , 45.37)	(32.83 , -71.65)	(32.83 , 71.65)
4	12	(0.00 , 21.75)	(30.76 , -63.26)	(30.76 , 63.26)
4	13	(0.00 , -11.03)	(-184.84 , 423.96)	(-184.84 , -423.96)
4	14	(0.00 , 50.87)	(60.59 , -407.06)	(60.59 , 407.06)
4	15	(0.00 , 26.79)	(99.73 , -312.06)	(99.73 , 312.06)
4	16	(0.00 , 7.32)	(-95.35 , 184.43)	(-95.35 , -184.43)
4	17	(0.00 , -45.23)	(46.96 , -97.12)	(46.96 , 97.12)
4	18	(0.00 , -121.08)	(245.22 , -26.24)	(245.22 , 26.24)
4	19	(0.00 , 32.65)	(-37.45 , 14.16)	(-37.45 , -14.16)
4	20	(0.00 , 22.03)	(-17.73 , 15.05)	(-17.73 , -15.05)
5	0	(0.00 , 82.28)	(18.51 , 37.08)	(18.51 , -37.08)
5	1	(0.00 , -1890.15)	(584.79 , 107.17)	(584.79 , -107.17)
5	2	(0.00 , 22.50)	(-181.08 , 1156.74)	(-181.08 , -1156.74)
5	3	(0.00 , 301.23)	(-52.68 , -357.68)	(-52.68 , 357.68)
5	4	(0.00 , -161.45)	(103.16 , -598.79)	(103.16 , 598.79)
5	5	(0.00 , -377.25)	(199.97 , 97.64)	(199.97 , -97.64)
5	6	(0.00 , -101.47)	(-96.30 , 81.86)	(-96.30 , -81.86)
5	7	(0.00 , -52.78)	(-35.65 , -50.28)	(-35.65 , 50.28)
5	8	(0.00 , 109.17)	(2.41 , 2.89)	(2.41 , -2.89)
5	9	(0.00 , -170.35)	(54.05 , 28.79)	(54.05 , -28.79)
5	10	(0.00 , -1.89)	(8.34 , -98.93)	(8.34 , 98.93)
5	11	(0.00 , 86.77)	(-19.46 , 93.35)	(-19.46 , -93.35)
5	12	(0.00 , 76.23)	(-20.43 , -36.80)	(-20.43 , 36.80)
5	13	(0.00 , -126.26)	(78.14 , -439.45)	(78.14 , 439.45)
5	14	(0.00 , -52.75)	(-1.67 , 177.18)	(-1.67 , -177.18)
5	15	(0.00 , 123.25)	(-28.50 , 67.87)	(-28.50 , -67.87)
5	16	(0.00 , -134.97)	(-2.17 , 85.71)	(-2.17 , -85.71)
5	17	(0.00 , 38.93)	(6.28 , -43.89)	(6.28 , 43.89)
5	18	(0.00 , 401.67)	(-120.94 , 80.90)	(-120.94 , -80.90)
5	19	(0.00 , -51.62)	(14.81 , -30.08)	(14.81 , 30.08)
5	20	(0.00 , -5.41)	(2.03 , 1.25)	(2.03 , -1.25)
6	0	(0.00 , 2.89)	(-107.58 , -30.51)	(-107.58 , 30.51)
6	1	(0.00 , 295.04)	(-212.46 , -62.93)	(-212.46 , 62.93)
6	2	(0.00 , -166.48)	(-56.28 , -182.37)	(-56.28 , 182.37)
6	3	(0.00 , 296.09)	(-169.48 , -159.75)	(-169.48 , 159.75)

6	4	(0.00 , -392.66)	(-418.11 , -257.63)	(-418.11 , 257.63)
6	5	(0.00 , 679.15)	(-7.38 , -1094.22)	(-7.38 , 1094.22)
6	6	(0.00 , 306.14)	(117.83 , -100.28)	(117.83 , 100.28)
6	7	(0.00 , 25.90)	(5.15 , -3.35)	(5.15 , 3.35)
6	8	(0.00 , -115.41)	(12.93 , -0.35)	(12.93 , 0.35)
6	9	(0.00 , 71.25)	(36.60 , 13.34)	(36.60 , -13.34)
6	10	(0.00 , -0.90)	(8.63 , 12.19)	(8.63 , -12.19)
6	11	(0.00 , 113.86)	(-22.24 , -88.32)	(-22.24 , 88.32)
6	12	(0.00 , -64.72)	(17.93 , 12.14)	(17.93 , -12.14)
6	13	(0.00 , 111.92)	(-170.82 , 65.97)	(-170.82 , -65.97)
6	14	(0.00 , -27.13)	(75.16 , -49.59)	(75.16 , 49.59)
6	15	(0.00 , -119.28)	(128.14 , -21.75)	(128.14 , 21.75)
6	16	(0.00 , 113.43)	(-103.41 , 9.71)	(-103.41 , -9.71)
6	17	(0.00 , -64.36)	(38.98 , 20.80)	(38.98 , -20.80)
6	18	(0.00 , -38.07)	(0.25 , 61.48)	(0.25 , -61.48)
6	19	(0.00 , 5.33)	(-27.47 , -12.03)	(-27.47 , 12.03)
6	20	(0.00 , -9.61)	(12.74 , -3.69)	(12.74 , 3.69)
7	0	(0.00 , 29.71)	(92.96 , 128.23)	(92.96 , -128.23)
7	1	(0.00 , 208.50)	(88.96 , 68.52)	(88.96 , -68.52)
7	2	(0.00 , 226.23)	(353.73 , 15.72)	(353.73 , -15.72)
7	3	(0.00 , 1085.21)	(-498.41 , 218.52)	(-498.41 , -218.52)
7	4	(0.00 , -188.45)	(45.16 , 145.63)	(45.16 , -145.63)
7	5	(0.00 , -477.88)	(166.58 , 441.71)	(166.58 , -441.71)
7	6	(0.00 , -133.06)	(-87.63 , -17.77)	(-87.63 , 17.77)
7	7	(0.00 , -156.70)	(-78.37 , -24.09)	(-78.37 , 24.09)
7	8	(0.00 , 77.96)	(55.00 , 46.63)	(55.00 , -46.63)
7	9	(0.00 , -28.38)	(-123.20 , -12.04)	(-123.20 , 12.04)
7	10	(0.00 , -91.39)	(-29.61 , -3.01)	(-29.61 , 3.01)
7	11	(0.00 , -244.31)	(163.20 , -146.89)	(163.20 , 146.89)
7	12	(0.00 , -101.34)	(-123.93 , -17.21)	(-123.93 , 17.21)
7	13	(0.00 , 563.45)	(-526.95 , -105.05)	(-526.95 , 105.05)
7	14	(0.00 , 309.80)	(53.99 , 46.54)	(53.99 , -46.54)
7	15	(0.00 , -362.10)	(203.02 , 46.29)	(203.02 , -46.29)
7	16	(0.00 , 290.21)	(-169.80 , -50.24)	(-169.80 , 50.24)
7	17	(0.00 , -227.73)	(109.93 , 14.27)	(109.93 , -14.27)
7	18	(0.00 , 67.14)	(1.50 , 0.53)	(1.50 , -0.53)
7	19	(0.00 , 40.97)	(-20.44 , -3.26)	(-20.44 , 3.26)
7	20	(0.00 , -16.15)	(-9.62 , 5.65)	(-9.62 , -5.65)
8	0	(0.00 , 308.21)	(173.59 , 249.85)	(173.59 , -249.85)
8	1	(0.00 , 0.60)	(-16.84 , 48.18)	(-16.84 , -48.18)
8	2	(0.00 , -130.43)	(-253.96 , -127.99)	(-253.96 , 127.99)
8	3	(0.00 , -419.51)	(137.77 , 95.15)	(137.77 , -95.15)
8	4	(0.00 , -322.44)	(-109.70 , -206.03)	(-109.70 , 206.03)
8	5	(0.00 , -985.65)	(722.72 , -584.04)	(722.72 , 584.04)

8	6	(0.00 , -538.56)	(-91.94 , -268.16)	(-91.94 , 268.16)
8	7	(0.00 , -173.65)	(-92.80 , -92.33)	(-92.80 , 92.33)
8	8	(0.00 , 150.98)	(-46.60 , 80.75)	(-46.60 , -80.75)
8	9	(0.00 , -132.19)	(-87.86 , -55.84)	(-87.86 , 55.84)
8	10	(0.00 , -41.92)	(-29.52 , -25.54)	(-29.52 , 25.54)
8	11	(0.00 , -316.09)	(157.58 , 24.72)	(157.58 , -24.72)
8	12	(0.00 , 95.79)	(33.54 , 12.83)	(33.54 , -12.83)
8	13	(0.00 , -194.75)	(204.99 , -38.47)	(204.99 , 38.47)
8	14	(0.00 , -108.81)	(-30.75 , -40.90)	(-30.75 , 40.90)
8	15	(0.00 , 107.59)	(-100.12 , -2.32)	(-100.12 , 2.32)
8	16	(0.00 , -116.45)	(56.42 , -3.32)	(56.42 , 3.32)
8	17	(0.00 , 18.32)	(-46.41 , 2.28)	(-46.41 , -2.28)
8	18	(0.00 , -179.93)	(63.21 , 6.36)	(63.21 , -6.36)
8	19	(0.00 , 70.29)	(42.40 , 19.40)	(42.40 , -19.40)
8	20	(0.00 , 39.54)	(-20.33 , -4.89)	(-20.33 , 4.89)
9	0	(0.00 , 13.40)	(79.53 , 23.50)	(79.53 , -23.50)
9	1	(0.00 , -29.44)	(-20.58 , 23.97)	(-20.58 , -23.97)
9	2	(0.00 , -70.52)	(82.43 , 42.66)	(82.43 , -42.66)
9	3	(0.00 , 112.86)	(-25.04 , -96.66)	(-25.04 , 96.66)
9	4	(0.00 , -255.13)	(72.56 , -0.10)	(72.56 , 0.10)
9	5	(0.00 , -19.11)	(31.32 , -38.34)	(31.32 , 38.34)
9	6	(0.00 , -6.17)	(-3.39 , 110.10)	(-3.39 , -110.10)
9	7	(0.00 , 119.45)	(116.99 , 86.58)	(116.99 , -86.58)
9	8	(0.00 , 59.82)	(-13.20 , -82.50)	(-13.20 , 82.50)
9	9	(0.00 , -160.59)	(-227.86 , -130.10)	(-227.86 , 130.10)
9	10	(0.00 , -71.95)	(-64.87 , -35.03)	(-64.87 , 35.03)
9	11	(0.00 , -750.42)	(240.55 , 388.69)	(240.55 , -388.69)
9	12	(0.00 , 208.12)	(193.55 , 157.02)	(193.55 , -157.02)
9	13	(0.00 , -321.71)	(80.36 , 302.89)	(80.36 , -302.89)
9	14	(0.00 , -489.03)	(122.05 , 311.70)	(122.05 , -311.70)
9	15	(0.00 , -35.28)	(108.56 , 61.04)	(108.56 , -61.04)
9	16	(0.00 , 138.80)	(-1.34 , -5.17)	(-1.34 , 5.17)
9	17	(0.00 , -41.18)	(17.43 , 9.68)	(17.43 , -9.68)
9	18	(0.00 , -134.77)	(26.57 , 56.66)	(26.57 , -56.66)
9	19	(0.00 , 135.57)	(66.32 , 25.40)	(66.32 , -25.40)
9	20	(0.00 , 30.73)	(-8.99 , -34.36)	(-8.99 , 34.36)
10	0	(0.00 , 33.07)	(4.65 , -166.95)	(4.65 , 166.95)
10	1	(0.00 , 30.33)	(74.02 , 32.04)	(74.02 , -32.04)
10	2	(0.00 , -131.70)	(104.49 , -12.95)	(104.49 , 12.95)
10	3	(0.00 , 134.40)	(-94.39 , 134.95)	(-94.39 , -134.95)
10	4	(0.00 , -376.31)	(51.11 , -31.35)	(51.11 , 31.35)
10	5	(0.00 , -19.59)	(97.19 , -156.83)	(97.19 , 156.83)
10	6	(0.00 , -239.46)	(-165.13 , 149.98)	(-165.13 , -149.98)
10	7	(0.00 , 208.46)	(54.68 , 145.71)	(54.68 , -145.71)

10	8	(0.00 , -258.17)	(26.17 , -189.76)	(26.17 , 189.76)
10	9	(0.00 , 178.12)	(178.68 , 9.44)	(178.68 , -9.44)
10	10	(0.00 , 54.71)	(24.09 , 42.69)	(24.09 , -42.69)
10	11	(0.00 , 413.35)	(-253.78 , 439.29)	(-253.78 , -439.29)
10	12	(0.00 , -0.08)	(156.39 , -95.50)	(156.39 , 95.50)
10	13	(0.00 , -104.87)	(75.17 , -209.02)	(75.17 , 209.02)
10	14	(0.00 , -339.68)	(198.35 , -271.66)	(198.35 , 271.66)
10	15	(0.00 , 32.14)	(95.10 , 37.21)	(95.10 , -37.21)
10	16	(0.00 , 139.60)	(-15.22 , 8.69)	(-15.22 , -8.69)
10	17	(0.00 , -71.37)	(7.06 , 30.60)	(7.06 , -30.60)
10	18	(0.00 , -23.29)	(44.17 , -66.20)	(44.17 , 66.20)
10	19	(0.00 , -14.00)	(-34.06 , -1.12)	(-34.06 , 1.12)
10	20	(0.00 , 17.99)	(11.83 , -15.14)	(11.83 , 15.14)
11	0	(0.00 , 181.87)	(89.63 , -811.92)	(89.63 , 811.92)
11	1	(0.00 , -27.85)	(17.09 , 80.10)	(17.09 , -80.10)
11	2	(0.00 , -895.29)	(362.77 , 42.15)	(362.77 , -42.15)
11	3	(0.00 , -319.73)	(157.28 , -83.98)	(157.28 , 83.98)
11	4	(0.00 , -1637.66)	(787.55 , 115.85)	(787.55 , -115.85)
11	5	(0.00 , 405.54)	(-157.16 , -214.42)	(-157.16 , 214.42)
11	6	(0.00 , 79.24)	(-213.19 , 1081.39)	(-213.19 , -1081.39)
11	7	(0.00 , -201.61)	(-29.95 , 396.75)	(-29.95 , -396.75)
11	8	(0.00 , 33.63)	(46.03 , -435.31)	(46.03 , 435.31)
11	9	(0.00 , -2.46)	(-82.84 , 207.71)	(-82.84 , -207.71)
11	10	(0.00 , -37.17)	(-14.39 , 132.68)	(-14.39 , -132.68)
11	11	(0.00 , -112.15)	(53.06 , -170.80)	(53.06 , 170.80)
11	12	(0.00 , 44.47)	(-74.43 , -93.14)	(-74.43 , 93.14)
11	13	(0.00 , 93.95)	(62.80 , -15.03)	(62.80 , 15.03)
11	14	(0.00 , 151.61)	(-65.92 , 23.20)	(-65.92 , -23.20)
11	15	(0.00 , 47.46)	(-109.50 , 28.49)	(-109.50 , -28.49)
11	16	(0.00 , -125.55)	(85.49 , 8.28)	(85.49 , -8.28)
11	17	(0.00 , -6.62)	(-33.42 , 71.28)	(-33.42 , -71.28)
11	18	(0.00 , -77.66)	(26.88 , 119.59)	(26.88 , -119.59)
11	19	(0.00 , 32.10)	(11.86 , -115.62)	(11.86 , 115.62)
11	20	(0.00 , 11.68)	(-11.05 , -16.38)	(-11.05 , 16.38)
12	0	(0.00 , -234.68)	(11.24 , 191.15)	(11.24 , -191.15)
12	1	(0.00 , 132.23)	(17.84 , 54.10)	(17.84 , -54.10)
12	2	(0.00 , 20.41)	(-98.28 , 2.92)	(-98.28 , -2.92)
12	3	(0.00 , -184.44)	(35.45 , 130.08)	(35.45 , -130.08)
12	4	(0.00 , 22.40)	(-32.26 , -12.85)	(-32.26 , 12.85)
12	5	(0.00 , 121.70)	(-21.68 , -28.86)	(-21.68 , 28.86)
12	6	(0.00 , -208.89)	(-78.94 , -73.04)	(-78.94 , 73.04)
12	7	(0.00 , -32.41)	(105.69 , 34.09)	(105.69 , -34.09)
12	8	(0.00 , -70.38)	(-396.81 , -172.48)	(-396.81 , 172.48)
12	9	(0.00 , -241.88)	(-361.18 , -153.91)	(-361.18 , 153.91)

12	10	(0.00 , -80.75)	(-35.80 , -5.86)	(-35.80 , 5.86)
12	11	(0.00 , -1460.38)	(470.13 , 468.47)	(470.13 , -468.47)
12	12	(0.00 , 75.20)	(-215.40 , -125.39)	(-215.40 , 125.39)
12	13	(0.00 , 197.12)	(-36.53 , -311.38)	(-36.53 , 311.38)
12	14	(0.00 , 613.70)	(-147.30 , -418.51)	(-147.30 , 418.51)
12	15	(0.00 , 31.01)	(-59.51 , -17.96)	(-59.51 , 17.96)
12	16	(0.00 , -75.53)	(51.52 , 29.13)	(51.52 , -29.13)
12	17	(0.00 , -7.22)	(-42.76 , -4.40)	(-42.76 , 4.40)
12	18	(0.00 , 272.31)	(93.74 , -102.61)	(93.74 , 102.61)
12	19	(0.00 , -25.50)	(-11.85 , -2.95)	(-11.85 , 2.95)
12	20	(0.00 , -87.31)	(-27.66 , -6.28)	(-27.66 , 6.28)
13	0	(0.00 , -58.33)	(21.79 , -21.53)	(21.79 , 21.53)
13	1	(0.00 , -81.48)	(6.58 , -20.88)	(6.58 , 20.88)
13	2	(0.00 , -38.86)	(-25.46 , -25.28)	(-25.46 , 25.28)
13	3	(0.00 , -29.16)	(12.39 , -55.77)	(12.39 , 55.77)
13	4	(0.00 , -91.47)	(-39.39 , -18.13)	(-39.39 , 18.13)
13	5	(0.00 , 43.44)	(19.35 , -129.67)	(19.35 , 129.67)
13	6	(0.00 , 6.61)	(-21.54 , -28.33)	(-21.54 , 28.33)
13	7	(0.00 , 102.62)	(160.95 , 76.66)	(160.95 , -76.66)
13	8	(0.00 , 130.13)	(74.50 , 34.24)	(74.50 , -34.24)
13	9	(0.00 , -4.34)	(53.81 , 36.25)	(53.81 , -36.25)
13	10	(0.00 , -15.39)	(7.15 , -8.46)	(7.15 , 8.46)
13	11	(0.00 , 331.92)	(-216.83 , 262.73)	(-216.83 , -262.73)
13	12	(0.00 , -127.14)	(-191.49 , -63.51)	(-191.49 , 63.51)
13	13	(0.00 , 352.87)	(-226.37 , 95.27)	(-226.37 , -95.27)
13	14	(0.00 , 597.71)	(-217.39 , 83.78)	(-217.39 , -83.78)
13	15	(0.00 , 24.15)	(-66.74 , -12.62)	(-66.74 , 12.62)
13	16	(0.00 , -82.71)	(59.76 , 6.84)	(59.76 , -6.84)
13	17	(0.00 , -8.38)	(-23.89 , 6.06)	(-23.89 , -6.06)
13	18	(0.00 , 91.56)	(-67.18 , -14.22)	(-67.18 , 14.22)
13	19	(0.00 , -41.42)	(5.68 , -17.21)	(5.68 , 17.21)
13	20	(0.00 , 10.52)	(18.31 , 5.39)	(18.31 , -5.39)
14	0	(0.00 , 114.90)	(-33.25 , 8.37)	(-33.25 , -8.37)
14	1	(0.00 , 94.27)	(10.02 , 26.18)	(10.02 , -26.18)
14	2	(0.00 , 77.71)	(60.04 , 15.01)	(60.04 , -15.01)
14	3	(0.00 , 146.14)	(-60.92 , 74.81)	(-60.92 , -74.81)
14	4	(0.00 , 117.31)	(42.59 , 39.91)	(42.59 , -39.91)
14	5	(0.00 , -101.62)	(-16.35 , 173.10)	(-16.35 , -173.10)
14	6	(0.00 , -1.33)	(61.68 , 54.58)	(61.68 , -54.58)
14	7	(0.00 , -159.77)	(-304.20 , -133.99)	(-304.20 , 133.99)
14	8	(0.00 , -210.69)	(-55.96 , -38.12)	(-55.96 , 38.12)
14	9	(0.00 , 35.24)	(-40.74 , -46.95)	(-40.74 , 46.95)
14	10	(0.00 , 56.19)	(-3.55 , -24.11)	(-3.55 , 24.11)
14	11	(0.00 , -350.54)	(305.05 , -550.44)	(305.05 , 550.44)

14	12	(0.00 , 190.68)	(311.68 , 96.79)	(311.68 , -96.79)
14	13	(0.00 , -546.48)	(321.27 , -117.63)	(321.27 , 117.63)
14	14	(0.00 , -970.31)	(362.41 , -93.10)	(362.41 , 93.10)
14	15	(0.00 , -102.48)	(113.49 , 8.45)	(113.49 , -8.45)
14	16	(0.00 , 129.87)	(-120.69 , -19.81)	(-120.69 , 19.81)
14	17	(0.00 , -7.02)	(50.39 , 11.51)	(50.39 , -11.51)
14	18	(0.00 , -153.48)	(78.72 , 34.34)	(78.72 , -34.34)
14	19	(0.00 , 49.28)	(-16.08 , 1.49)	(-16.08 , -1.49)
14	20	(0.00 , -2.52)	(-28.71 , -1.74)	(-28.71 , 1.74)
15	0	(0.00 , 33.05)	(127.83 , -2.48)	(127.83 , 2.48)
15	1	(0.00 , -198.71)	(197.94 , 48.16)	(197.94 , -48.16)
15	2	(0.00 , 23.83)	(-4.52 , -81.43)	(-4.52 , 81.43)
15	3	(0.00 , -4.80)	(-28.80 , 150.90)	(-28.80 , -150.90)
15	4	(0.00 , -97.97)	(9.51 , 22.47)	(9.51 , -22.47)
15	5	(0.00 , -391.26)	(190.04 , 28.56)	(190.04 , -28.56)
15	6	(0.00 , -128.61)	(-16.08 , -11.59)	(-16.08 , 11.59)
15	7	(0.00 , 167.50)	(47.41 , 17.43)	(47.41 , -17.43)
15	8	(0.00 , 287.30)	(165.22 , 73.47)	(165.22 , -73.47)
15	9	(0.00 , -80.15)	(18.43 , -74.92)	(18.43 , 74.92)
15	10	(0.00 , -61.90)	(-27.26 , -36.44)	(-27.26 , 36.44)
15	11	(0.00 , 216.27)	(-115.05 , 154.77)	(-115.05 , -154.77)
15	12	(0.00 , 28.84)	(-44.63 , 136.28)	(-44.63 , -136.28)
15	13	(0.00 , 57.74)	(-72.12 , 308.19)	(-72.12 , -308.19)
15	14	(0.00 , 73.31)	(-120.52 , 426.49)	(-120.52 , -426.49)
15	15	(0.00 , 0.98)	(-75.41 , 67.47)	(-75.41 , -67.47)
15	16	(0.00 , 35.19)	(73.52 , -71.72)	(73.52 , 71.72)
15	17	(0.00 , -3.08)	(-19.16 , -9.88)	(-19.16 , 9.88)
15	18	(0.00 , -95.72)	(-112.22 , 34.48)	(-112.22 , -34.48)
15	19	(0.00 , 54.64)	(60.51 , 31.05)	(60.51 , -31.05)
15	20	(0.00 , 46.07)	(11.50 , -13.64)	(11.50 , 13.64)
16	0	(0.00 , -68.25)	(42.47 , 14.47)	(42.47 , -14.47)
16	1	(0.00 , -92.50)	(67.17 , 9.38)	(67.17 , -9.38)
16	2	(0.00 , 29.87)	(12.22 , -11.86)	(12.22 , 11.86)
16	3	(0.00 , 13.68)	(-7.39 , 19.32)	(-7.39 , -19.32)
16	4	(0.00 , -3.70)	(14.25 , 36.28)	(14.25 , -36.28)
16	5	(0.00 , -69.97)	(23.62 , 91.11)	(23.62 , -91.11)
16	6	(0.00 , -60.67)	(-50.76 , 4.04)	(-50.76 , -4.04)
16	7	(0.00 , 90.07)	(114.44 , 56.88)	(114.44 , -56.88)
16	8	(0.00 , 85.67)	(12.84 , -12.71)	(12.84 , 12.71)
16	9	(0.00 , -46.21)	(-14.97 , 1.67)	(-14.97 , -1.67)
16	10	(0.00 , -4.18)	(-6.03 , -35.35)	(-6.03 , 35.35)
16	11	(0.00 , 4.47)	(-71.51 , 285.77)	(-71.51 , -285.77)
16	12	(0.00 , -25.74)	(-70.48 , -7.62)	(-70.48 , 7.62)
16	13	(0.00 , 133.35)	(-95.07 , 63.43)	(-95.07 , -63.43)

16	14	(0.00 , 234.56)	(-88.32 , 56.57)	(-88.32 , -56.57)
16	15	(0.00 , 32.59)	(-28.97 , 10.71)	(-28.97 , -10.71)
16	16	(0.00 , -0.88)	(39.00 , 0.25)	(39.00 , -0.25)
16	17	(0.00 , -17.63)	(-13.03 , 5.00)	(-13.03 , -5.00)
16	18	(0.00 , 49.45)	(-31.43 , -24.45)	(-31.43 , 24.45)
16	19	(0.00 , -0.07)	(12.72 , 9.44)	(12.72 , -9.44)
16	20	(0.00 , 14.85)	(4.50 , -3.13)	(4.50 , 3.13)
17	0	(0.00 , 38.03)	(68.40 , -136.45)	(68.40 , 136.45)
17	1	(0.00 , -10.63)	(75.20 , 18.74)	(75.20 , -18.74)
17	2	(0.00 , -69.11)	(-20.26 , -113.09)	(-20.26 , 113.09)
17	3	(0.00 , 157.73)	(-107.87 , 76.45)	(-107.87 , -76.45)
17	4	(0.00 , -299.87)	(-111.79 , -89.72)	(-111.79 , 89.72)
17	5	(0.00 , -107.40)	(196.03 , -494.35)	(196.03 , 494.35)
17	6	(0.00 , -91.62)	(62.94 , 54.95)	(62.94 , -54.95)
17	7	(0.00 , -96.32)	(-174.34 , -14.95)	(-174.34 , 14.95)
17	8	(0.00 , 36.05)	(79.28 , 2.40)	(79.28 , -2.40)
17	9	(0.00 , -41.45)	(-59.15 , -47.15)	(-59.15 , 47.15)
17	10	(0.00 , -32.17)	(-20.17 , -1.91)	(-20.17 , 1.91)
17	11	(0.00 , -99.91)	(138.12 , -374.24)	(138.12 , 374.24)
17	12	(0.00 , -8.64)	(-68.54 , -31.29)	(-68.54 , 31.29)
17	13	(0.00 , 119.17)	(-95.17 , 40.16)	(-95.17 , -40.16)
17	14	(0.00 , 100.95)	(-29.11 , 97.54)	(-29.11 , -97.54)
17	15	(0.00 , -61.74)	(6.28 , 6.49)	(6.28 , -6.49)
17	16	(0.00 , 17.60)	(-38.83 , -35.34)	(-38.83 , 35.34)
17	17	(0.00 , -50.05)	(15.70 , 27.99)	(15.70 , -27.99)
17	18	(0.00 , 12.78)	(-74.23 , 80.93)	(-74.23 , -80.93)
17	19	(0.00 , 10.33)	(27.18 , -21.90)	(27.18 , 21.90)
17	20	(0.00 , 10.58)	(-5.92 , -11.15)	(-5.92 , 11.15)
18	0	(0.00 , 92.91)	(-126.15 , -18.57)	(-126.15 , 18.57)
18	1	(0.00 , 363.93)	(-383.31 , -75.06)	(-383.31 , 75.06)
18	2	(0.00 , -96.84)	(0.49 , 215.36)	(0.49 , -215.36)
18	3	(0.00 , -114.42)	(108.08 , -237.90)	(108.08 , 237.90)
18	4	(0.00 , 224.54)	(-10.51 , -58.30)	(-10.51 , 58.30)
18	5	(0.00 , 155.55)	(-71.99 , 48.63)	(-71.99 , -48.63)
18	6	(0.00 , 430.81)	(-179.28 , -16.24)	(-179.28 , 16.24)
18	7	(0.00 , -775.24)	(393.40 , 150.50)	(393.40 , -150.50)
18	8	(0.00 , 133.05)	(-177.34 , 191.39)	(-177.34 , -191.39)
18	9	(0.00 , 4.88)	(-85.05 , 658.40)	(-85.05 , -658.40)
18	10	(0.00 , 40.43)	(-7.21 , 119.39)	(-7.21 , -119.39)
18	11	(0.00 , 97.69)	(-91.62 , 187.96)	(-91.62 , -187.96)
18	12	(0.00 , -114.65)	(105.87 , -20.94)	(105.87 , 20.94)
18	13	(0.00 , -6.38)	(2.73 , -78.43)	(2.73 , 78.43)
18	14	(0.00 , -87.51)	(51.77 , -142.18)	(51.77 , 142.18)
18	15	(0.00 , -36.98)	(72.13 , 2.74)	(72.13 , -2.74)

18	16	(0.00 , -134.61)	(-5.40 , 35.05)	(-5.40 , -35.05)
18	17	(0.00 , 112.83)	(1.73 , -47.29)	(1.73 , 47.29)
18	18	(0.00 , -143.91)	(193.70 , -95.94)	(193.70 , 95.94)
18	19	(0.00 , 10.08)	(-18.34 , -64.95)	(-18.34 , 64.95)
18	20	(0.00 , -24.46)	(-5.54 , 66.84)	(-5.54 , -66.84)
19	0	(0.00 , -15.36)	(-63.22 , -4.83)	(-63.22 , 4.83)
19	1	(0.00 , 189.01)	(-213.16 , 4.73)	(-213.16 , -4.73)
19	2	(0.00 , 37.79)	(-64.80 , 90.16)	(-64.80 , -90.16)
19	3	(0.00 , -118.11)	(89.11 , -83.13)	(89.11 , 83.13)
19	4	(0.00 , -43.96)	(54.66 , -34.19)	(54.66 , 34.19)
19	5	(0.00 , 165.44)	(-99.19 , 30.56)	(-99.19 , -30.56)
19	6	(0.00 , -587.85)	(317.48 , 83.37)	(317.48 , -83.37)
19	7	(0.00 , 1368.97)	(-571.08 , -213.48)	(-571.08 , 213.48)
19	8	(0.00 , -308.68)	(214.59 , -408.82)	(214.59 , 408.82)
19	9	(0.00 , 84.44)	(165.66 , -1030.26)	(165.66 , 1030.26)
19	10	(0.00 , -15.96)	(61.13 , -223.50)	(61.13 , 223.50)
19	11	(0.00 , -52.80)	(41.69 , -167.54)	(41.69 , 167.54)
19	12	(0.00 , 140.58)	(-172.49 , -11.19)	(-172.49 , 11.19)
19	13	(0.00 , 40.99)	(20.55 , -49.64)	(20.55 , 49.64)
19	14	(0.00 , 256.02)	(-125.30 , 0.54)	(-125.30 , -0.54)
19	15	(0.00 , 101.97)	(-71.63 , -58.03)	(-71.63 , 58.03)
19	16	(0.00 , 158.40)	(-63.83 , 9.07)	(-63.83 , -9.07)
19	17	(0.00 , -49.38)	(26.83 , -55.81)	(26.83 , 55.81)
19	18	(0.00 , 125.01)	(-55.70 , 141.76)	(-55.70 , -141.76)
19	19	(0.00 , -53.81)	(-50.12 , 91.62)	(-50.12 , -91.62)
19	20	(0.00 , 15.77)	(3.44 , -121.26)	(3.44 , 121.26)
20	0	(0.00 , 201.46)	(-104.37 , -65.84)	(-104.37 , 65.84)
20	1	(0.00 , 709.65)	(-631.85 , -46.35)	(-631.85 , 46.35)
20	2	(0.00 , -38.73)	(-60.46 , 321.02)	(-60.46 , -321.02)
20	3	(0.00 , -381.46)	(249.36 , -198.19)	(249.36 , 198.19)
20	4	(0.00 , 276.79)	(82.09 , -44.58)	(82.09 , 44.58)
20	5	(0.00 , -200.62)	(61.06 , 254.60)	(61.06 , -254.60)
20	6	(0.00 , -147.77)	(-27.36 , 61.58)	(-27.36 , -61.58)
20	7	(0.00 , 433.11)	(61.47 , 46.89)	(61.47 , -46.89)
20	8	(0.00 , 257.90)	(41.55 , -102.55)	(41.55 , 102.55)
20	9	(0.00 , -42.81)	(40.03 , -147.75)	(40.03 , 147.75)
20	10	(0.00 , -57.14)	(17.68 , -63.93)	(17.68 , 63.93)
20	11	(0.00 , 120.25)	(-155.28 , 407.50)	(-155.28 , -407.50)
20	12	(0.00 , 105.12)	(32.65 , 213.95)	(32.65 , -213.95)
20	13	(0.00 , -100.93)	(93.84 , 164.81)	(93.84 , -164.81)
20	14	(0.00 , -114.99)	(-85.29 , 217.98)	(-85.29 , -217.98)
20	15	(0.00 , 27.54)	(-56.06 , 26.56)	(-56.06 , -26.56)
20	16	(0.00 , -16.68)	(-2.50 , 40.14)	(-2.50 , -40.14)
20	17	(0.00 , 44.87)	(-3.22 , -9.65)	(-3.22 , 9.65)

20	18	(0.00 , -338.89)	(210.47 , 16.86)	(210.47 , -16.86)
20	19	(0.00 , 111.48)	(15.37 , 48.15)	(15.37 , -48.15)
20	20	(0.00 , 99.33)	(-6.88 , -0.24)	(-6.88 , 0.24)

Pt-A'

T	S	MS= 0	-1	+1
1	0	(0.00 , -27.86)	(-25.89 , 29.73)	(-25.89 , -29.73)
1	1	(0.00 , -116.99)	(-150.83 , -52.14)	(-150.83 , 52.14)
1	2	(0.00 , -44.36)	(-69.17 , -4.22)	(-69.17 , 4.22)
1	3	(0.00 , 40.72)	(32.09 , 15.38)	(32.09 , -15.38)
1	4	(0.00 , -21.83)	(22.29 , 20.07)	(22.29 , -20.07)
1	5	(0.00 , 27.60)	(-13.81 , -3.44)	(-13.81 , 3.44)
1	6	(0.00 , 21.27)	(17.20 , -1.15)	(17.20 , 1.15)
1	7	(0.00 , -4.22)	(-5.83 , -0.40)	(-5.83 , 0.40)
1	8	(0.00 , 2.34)	(-1.63 , 1.47)	(-1.63 , -1.47)
1	9	(0.00 , 45.00)	(15.69 , 19.82)	(15.69 , -19.82)
1	10	(0.00 , 30.31)	(-20.63 , -4.12)	(-20.63 , 4.12)
1	11	(0.00 , 64.29)	(-11.57 , -3.21)	(-11.57 , 3.21)
1	12	(0.00 , 0.14)	(3.20 , 4.33)	(3.20 , -4.33)
1	13	(0.00 , -34.47)	(-6.12 , 10.47)	(-6.12 , -10.47)
1	14	(0.00 , 25.49)	(-3.66 , 0.54)	(-3.66 , -0.54)
1	15	(0.00 , -42.14)	(9.25 , 5.94)	(9.25 , -5.94)
1	16	(0.00 , -5.23)	(1.45 , 11.41)	(1.45 , -11.41)
1	17	(0.00 , 0.20)	(-2.89 , -10.39)	(-2.89 , 10.39)
1	18	(0.00 , -8.69)	(-11.64 , 10.37)	(-11.64 , -10.37)
1	19	(0.00 , 25.78)	(-9.48 , 9.59)	(-9.48 , -9.59)
1	20	(0.00 , -64.47)	(-5.75 , -3.35)	(-5.75 , 3.35)
2	0	(0.00 , 0.51)	(-19.49 , -30.31)	(-19.49 , 30.31)
2	1	(0.00 , -1.52)	(12.96 , 16.65)	(12.96 , -16.65)
2	2	(0.00 , 21.00)	(-3.28 , 4.99)	(-3.28 , -4.99)
2	3	(0.00 , 57.90)	(67.85 , 28.84)	(67.85 , -28.84)
2	4	(0.00 , 15.63)	(21.70 , 7.02)	(21.70 , -7.02)
2	5	(0.00 , -2.70)	(1.68 , -1.37)	(1.68 , 1.37)
2	6	(0.00 , 2.77)	(7.21 , 3.78)	(7.21 , -3.78)
2	7	(0.00 , 17.11)	(-1.80 , 2.19)	(-1.80 , -2.19)
2	8	(0.00 , -9.37)	(-2.01 , 0.38)	(-2.01 , -0.38)
2	9	(0.00 , -39.66)	(-15.29 , -3.72)	(-15.29 , 3.72)
2	10	(0.00 , -29.27)	(-4.45 , 2.16)	(-4.45 , -2.16)
2	11	(0.00 , 11.40)	(10.68 , 4.94)	(10.68 , -4.94)
2	12	(0.00 , -0.53)	(-3.57 , -3.06)	(-3.57 , 3.06)
2	13	(0.00 , -20.36)	(-7.31 , -6.87)	(-7.31 , 6.87)
2	14	(0.00 , 8.14)	(1.48 , 3.73)	(1.48 , -3.73)
2	15	(0.00 , -31.15)	(4.73 , -3.85)	(4.73 , 3.85)

2	16	(	0.00 ,	4.64)	(	4.86 ,	9.83)	(	4.86 ,	-9.83)
2	17	(	0.00 ,	-12.46)	(	10.41 ,	-13.38)	(	10.41 ,	13.38)
2	18	(	0.00 ,	-27.55)	(	1.80 ,	-14.69)	(	1.80 ,	14.69)
2	19	(	0.00 ,	-23.27)	(	-8.60 ,	9.33)	(	-8.60 ,	-9.33)
2	20	(	0.00 ,	4.55)	(	0.15 ,	-1.07)	(	0.15 ,	1.07)
3	0	(	0.00 ,	-16.41)	(	-23.00 ,	-64.21)	(	-23.00 ,	64.21)
3	1	(	0.00 ,	42.39)	(	81.05 ,	49.37)	(	81.05 ,	-49.37)
3	2	(	0.00 ,	65.80)	(	28.96 ,	10.59)	(	28.96 ,	-10.59)
3	3	(	0.00 ,	79.82)	(	102.57 ,	44.41)	(	102.57 ,	-44.41)
3	4	(	0.00 ,	51.95)	(	50.88 ,	13.52)	(	50.88 ,	-13.52)
3	5	(	0.00 ,	-17.78)	(	9.00 ,	6.31)	(	9.00 ,	-6.31)
3	6	(	0.00 ,	8.28)	(	19.10 ,	7.00)	(	19.10 ,	-7.00)
3	7	(	0.00 ,	19.15)	(	-4.03 ,	2.59)	(	-4.03 ,	-2.59)
3	8	(	0.00 ,	-19.36)	(	0.36 ,	0.11)	(	0.36 ,	-0.11)
3	9	(	0.00 ,	-67.57)	(	-13.01 ,	-4.60)	(	-13.01 ,	4.60)
3	10	(	0.00 ,	-73.13)	(	-7.65 ,	5.52)	(	-7.65 ,	-5.52)
3	11	(	0.00 ,	-16.70)	(	13.63 ,	6.44)	(	13.63 ,	-6.44)
3	12	(	0.00 ,	1.81)	(	-5.14 ,	-5.92)	(	-5.14 ,	5.92)
3	13	(	0.00 ,	-14.81)	(	-4.41 ,	-17.99)	(	-4.41 ,	17.99)
3	14	(	0.00 ,	3.42)	(	2.46 ,	7.75)	(	2.46 ,	-7.75)
3	15	(	0.00 ,	-39.17)	(	2.15 ,	-9.14)	(	2.15 ,	9.14)
3	16	(	0.00 ,	10.47)	(	6.15 ,	3.99)	(	6.15 ,	-3.99)
3	17	(	0.00 ,	-28.19)	(	16.57 ,	-25.25)	(	16.57 ,	25.25)
3	18	(	0.00 ,	-39.53)	(	15.36 ,	-45.17)	(	15.36 ,	45.17)
3	19	(	0.00 ,	-46.41)	(	-3.83 ,	9.82)	(	-3.83 ,	-9.82)
3	20	(	0.00 ,	31.87)	(	-0.07 ,	-0.69)	(	-0.07 ,	0.69)
4	0	(	0.00 ,	-414.70)	(	122.45 ,	-2.89)	(	122.45 ,	2.89)
4	1	(	0.00 ,	-71.28)	(	-98.51 ,	-34.42)	(	-98.51 ,	34.42)
4	2	(	0.00 ,	321.99)	(	469.04 ,	141.25)	(	469.04 ,	-141.25)
4	3	(	0.00 ,	29.59)	(	109.05 ,	20.63)	(	109.05 ,	-20.63)
4	4	(	0.00 ,	-12.88)	(	6.09 ,	57.30)	(	6.09 ,	-57.30)
4	5	(	0.00 ,	2.33)	(	23.73 ,	22.67)	(	23.73 ,	-22.67)
4	6	(	0.00 ,	24.84)	(	13.73 ,	-10.73)	(	13.73 ,	10.73)
4	7	(	0.00 ,	6.78)	(	17.48 ,	-0.16)	(	17.48 ,	0.16)
4	8	(	0.00 ,	-21.54)	(	-9.30 ,	-10.31)	(	-9.30 ,	10.31)
4	9	(	0.00 ,	-5.64)	(	-17.32 ,	40.71)	(	-17.32 ,	-40.71)
4	10	(	0.00 ,	-11.70)	(	-24.09 ,	53.27)	(	-24.09 ,	-53.27)
4	11	(	0.00 ,	-44.47)	(	10.22 ,	38.62)	(	10.22 ,	-38.62)
4	12	(	0.00 ,	-1.58)	(	-1.56 ,	-3.35)	(	-1.56 ,	3.35)
4	13	(	0.00 ,	-32.72)	(	10.32 ,	-48.61)	(	10.32 ,	48.61)
4	14	(	0.00 ,	-19.32)	(	-6.91 ,	18.87)	(	-6.91 ,	-18.87)
4	15	(	0.00 ,	24.04)	(	2.07 ,	-34.13)	(	2.07 ,	34.13)
4	16	(	0.00 ,	-6.66)	(	-21.31 ,	-5.40)	(	-21.31 ,	5.40)
4	17	(	0.00 ,	-7.53)	(	-26.95 ,	2.91)	(	-26.95 ,	-2.91)

4	18	(0.00 , -36.77)	(-80.13 , -9.37)	(-80.13 , 9.37)
4	19	(0.00 , -44.09)	(-11.98 , 32.29)	(-11.98 , -32.29)
4	20	(0.00 , 49.24)	(31.05 , -25.95)	(31.05 , 25.95)
5	0	(0.00 , 187.31)	(108.30 , -291.76)	(108.30 , 291.76)
5	1	(0.00 , 9.45)	(57.79 , 30.45)	(57.79 , -30.45)
5	2	(0.00 , -19.32)	(3.81 , 38.25)	(3.81 , -38.25)
5	3	(0.00 , 108.15)	(131.44 , -0.74)	(131.44 , 0.74)
5	4	(0.00 , -315.34)	(-440.84 , -148.63)	(-440.84 , 148.63)
5	5	(0.00 , 35.83)	(54.61 , 15.25)	(54.61 , -15.25)
5	6	(0.00 , 22.95)	(-4.97 , 29.30)	(-4.97 , -29.30)
5	7	(0.00 , 0.78)	(25.12 , 21.24)	(25.12 , -21.24)
5	8	(0.00 , -3.54)	(-8.92 , -3.41)	(-8.92 , 3.41)
5	9	(0.00 , -34.02)	(-17.69 , -16.99)	(-17.69 , 16.99)
5	10	(0.00 , 34.21)	(47.93 , -6.40)	(47.93 , 6.40)
5	11	(0.00 , 20.07)	(61.13 , -1.99)	(61.13 , 1.99)
5	12	(0.00 , -16.28)	(-19.46 , -9.14)	(-19.46 , 9.14)
5	13	(0.00 , -42.86)	(-25.92 , 31.23)	(-25.92 , -31.23)
5	14	(0.00 , -11.56)	(-1.17 , 6.45)	(-1.17 , -6.45)
5	15	(0.00 , 22.74)	(27.84 , -53.04)	(27.84 , 53.04)
5	16	(0.00 , -62.12)	(-17.50 , 104.65)	(-17.50 , -104.65)
5	17	(0.00 , 24.29)	(-40.06 , 114.86)	(-40.06 , -114.86)
5	18	(0.00 , -79.72)	(-87.15 , 334.49)	(-87.15 , -334.49)
5	19	(0.00 , -24.95)	(-24.23 , 35.22)	(-24.23 , -35.22)
5	20	(0.00 , 9.22)	(22.15 , 2.90)	(22.15 , -2.90)
6	0	(0.00 , 83.90)	(148.38 , -549.20)	(148.38 , 549.20)
6	1	(0.00 , 253.59)	(406.71 , 108.77)	(406.71 , -108.77)
6	2	(0.00 , 2.70)	(54.10 , 45.03)	(54.10 , -45.03)
6	3	(0.00 , -7.87)	(16.47 , -76.50)	(16.47 , 76.50)
6	4	(0.00 , 42.18)	(55.05 , -50.85)	(55.05 , 50.85)
6	5	(0.00 , -43.46)	(39.97 , 8.60)	(39.97 , -8.60)
6	6	(0.00 , -4.94)	(-19.06 , 13.37)	(-19.06 , -13.37)
6	7	(0.00 , 10.37)	(2.73 , 11.70)	(2.73 , -11.70)
6	8	(0.00 , -51.25)	(-18.59 , -23.71)	(-18.59 , 23.71)
6	9	(0.00 , -15.10)	(32.77 , -11.83)	(32.77 , 11.83)
6	10	(0.00 , -121.93)	(26.16 , 13.75)	(26.16 , -13.75)
6	11	(0.00 , -137.41)	(39.72 , -7.01)	(39.72 , 7.01)
6	12	(0.00 , 25.87)	(1.60 , -7.33)	(1.60 , 7.33)
6	13	(0.00 , 63.64)	(0.63 , -29.21)	(0.63 , 29.21)
6	14	(0.00 , -52.27)	(6.61 , -3.79)	(6.61 , 3.79)
6	15	(0.00 , 42.62)	(-2.66 , 8.84)	(-2.66 , -8.84)
6	16	(0.00 , 3.87)	(4.23 , 14.50)	(4.23 , -14.50)
6	17	(0.00 , 24.16)	(23.38 , 10.61)	(23.38 , -10.61)
6	18	(0.00 , 41.52)	(49.45 , 37.90)	(49.45 , -37.90)
6	19	(0.00 , -93.02)	(13.46 , -14.90)	(13.46 , 14.90)

6	20	(0.00 , 116.08)	(-5.63 , 22.88)	(-5.63 , -22.88)
7	0	(0.00 , 119.24)	(-99.39 , -27.77)	(-99.39 , 27.77)
7	1	(0.00 , 51.81)	(60.61 , 9.71)	(60.61 , -9.71)
7	2	(0.00 , -42.35)	(-3.68 , 2.75)	(-3.68 , -2.75)
7	3	(0.00 , 72.21)	(104.15 , 37.51)	(104.15 , -37.51)
7	4	(0.00 , 96.42)	(204.99 , 50.65)	(204.99 , -50.65)
7	5	(0.00 , -18.84)	(-20.58 , -9.86)	(-20.58 , 9.86)
7	6	(0.00 , -58.46)	(-55.33 , -5.45)	(-55.33 , 5.45)
7	7	(0.00 , 26.83)	(-10.67 , -3.19)	(-10.67 , 3.19)
7	8	(0.00 , 1.74)	(18.53 , 11.83)	(18.53 , -11.83)
7	9	(0.00 , -145.80)	(-120.70 , -41.01)	(-120.70 , 41.01)
7	10	(0.00 , -30.42)	(8.18 , 12.67)	(8.18 , -12.67)
7	11	(0.00 , 30.93)	(36.28 , 21.39)	(36.28 , -21.39)
7	12	(0.00 , -4.45)	(-14.18 , -8.00)	(-14.18 , 8.00)
7	13	(0.00 , -20.90)	(-23.17 , -17.06)	(-23.17 , 17.06)
7	14	(0.00 , 8.10)	(5.67 , 0.60)	(5.67 , -0.60)
7	15	(0.00 , -64.49)	(10.83 , 31.61)	(10.83 , -31.61)
7	16	(0.00 , 34.06)	(-3.63 , -6.50)	(-3.63 , 6.50)
7	17	(0.00 , -15.10)	(27.91 , -36.58)	(27.91 , 36.58)
7	18	(0.00 , 39.54)	(24.57 , -77.70)	(24.57 , 77.70)
7	19	(0.00 , -23.52)	(4.08 , 16.96)	(4.08 , -16.96)
7	20	(0.00 , 15.20)	(-7.74 , -3.46)	(-7.74 , 3.46)
8	0	(0.00 , -125.48)	(64.17 , 340.60)	(64.17 , -340.60)
8	1	(0.00 , -29.68)	(-76.70 , -32.36)	(-76.70 , 32.36)
8	2	(0.00 , 26.84)	(72.48 , -9.45)	(72.48 , 9.45)
8	3	(0.00 , -88.88)	(-153.02 , -42.23)	(-153.02 , 42.23)
8	4	(0.00 , -3.93)	(21.44 , 29.54)	(21.44 , -29.54)
8	5	(0.00 , 9.40)	(-9.17 , -7.53)	(-9.17 , 7.53)
8	6	(0.00 , 43.53)	(83.32 , 30.10)	(83.32 , -30.10)
8	7	(0.00 , 20.02)	(35.19 , -5.59)	(35.19 , 5.59)
8	8	(0.00 , -26.25)	(-31.22 , 15.93)	(-31.22 , -15.93)
8	9	(0.00 , -31.88)	(-71.64 , -20.27)	(-71.64 , 20.27)
8	10	(0.00 , -17.82)	(-69.39 , -29.75)	(-69.39 , 29.75)
8	11	(0.00 , 71.53)	(37.37 , 11.72)	(37.37 , -11.72)
8	12	(0.00 , -5.51)	(-12.74 , -3.04)	(-12.74 , 3.04)
8	13	(0.00 , -114.78)	(-82.67 , -37.25)	(-82.67 , 37.25)
8	14	(0.00 , 10.42)	(18.57 , 9.34)	(18.57 , -9.34)
8	15	(0.00 , 68.82)	(-3.62 , 10.65)	(-3.62 , -10.65)
8	16	(0.00 , -21.60)	(5.15 , -26.04)	(5.15 , 26.04)
8	17	(0.00 , 6.41)	(0.27 , 14.91)	(0.27 , -14.91)
8	18	(0.00 , -45.94)	(-17.22 , -43.44)	(-17.22 , 43.44)
8	19	(0.00 , -7.72)	(-6.22 , -3.86)	(-6.22 , 3.86)
8	20	(0.00 , -39.57)	(-10.80 , -9.47)	(-10.80 , 9.47)
9	0	(0.00 , 170.45)	(-141.80 , -222.82)	(-141.80 , 222.82)

9	1	(0.00 , -8.51)	(-36.77 , -14.48)	(-36.77 , 14.48)
9	2	(0.00 , -110.40)	(-89.12 , -8.23)	(-89.12 , 8.23)
9	3	(0.00 , 213.78)	(362.36 , 116.39)	(362.36 , -116.39)
9	4	(0.00 , 32.09)	(63.89 , 3.25)	(63.89 , -3.25)
9	5	(0.00 , -1.53)	(7.74 , 11.34)	(7.74 , -11.34)
9	6	(0.00 , 4.20)	(-3.04 , -2.38)	(-3.04 , 2.38)
9	7	(0.00 , 44.66)	(-14.81 , 0.50)	(-14.81 , -0.50)
9	8	(0.00 , -34.56)	(-40.87 , -12.00)	(-40.87 , 12.00)
9	9	(0.00 , 37.02)	(80.76 , 26.77)	(80.76 , -26.77)
9	10	(0.00 , -97.67)	(-55.54 , -12.60)	(-55.54 , 12.60)
9	11	(0.00 , 16.93)	(1.66 , 24.23)	(1.66 , -24.23)
9	12	(0.00 , 11.29)	(14.61 , 8.58)	(14.61 , -8.58)
9	13	(0.00 , -60.47)	(-47.25 , -2.71)	(-47.25 , 2.71)
9	14	(0.00 , 41.08)	(-10.24 , 6.04)	(-10.24 , -6.04)
9	15	(0.00 , -140.64)	(56.26 , 7.83)	(56.26 , -7.83)
9	16	(0.00 , 55.81)	(-10.76 , 11.67)	(-10.76 , -11.67)
9	17	(0.00 , -49.98)	(36.26 , -22.96)	(36.26 , 22.96)
9	18	(0.00 , 51.57)	(25.59 , -0.33)	(25.59 , 0.33)
9	19	(0.00 , -20.78)	(-27.48 , 15.69)	(-27.48 , -15.69)
9	20	(0.00 , -4.03)	(-6.06 , -25.91)	(-6.06 , 25.91)
10	0	(0.00 , 27.35)	(-24.74 , -3.43)	(-24.74 , 3.43)
10	1	(0.00 , 2.78)	(3.04 , 3.62)	(3.04 , -3.62)
10	2	(0.00 , -1.43)	(-0.73 , 1.14)	(-0.73 , -1.14)
10	3	(0.00 , 19.39)	(20.73 , 11.54)	(20.73 , -11.54)
10	4	(0.00 , -0.18)	(15.75 , 4.63)	(15.75 , -4.63)
10	5	(0.00 , 7.67)	(-1.13 , -7.38)	(-1.13 , 7.38)
10	6	(0.00 , -5.37)	(-8.25 , -3.89)	(-8.25 , 3.89)
10	7	(0.00 , 8.20)	(-5.45 , -4.06)	(-5.45 , 4.06)
10	8	(0.00 , 10.63)	(7.91 , 0.11)	(7.91 , -0.11)
10	9	(0.00 , -16.12)	(-10.85 , -1.17)	(-10.85 , 1.17)
10	10	(0.00 , 7.39)	(10.92 , 5.38)	(10.92 , -5.38)
10	11	(0.00 , -4.06)	(-2.82 , 2.39)	(-2.82 , -2.39)
10	12	(0.00 , 4.32)	(0.67 , 3.69)	(0.67 , -3.69)
10	13	(0.00 , 9.60)	(11.59 , 5.01)	(11.59 , -5.01)
10	14	(0.00 , -9.24)	(-2.53 , -2.07)	(-2.53 , 2.07)
10	15	(0.00 , -14.47)	(-1.70 , -4.75)	(-1.70 , 4.75)
10	16	(0.00 , 7.49)	(4.92 , 1.24)	(4.92 , -1.24)
10	17	(0.00 , -2.51)	(3.57 , -3.86)	(3.57 , 3.86)
10	18	(0.00 , -5.20)	(-0.02 , -8.71)	(-0.02 , 8.71)
10	19	(0.00 , 1.56)	(-0.75 , 1.28)	(-0.75 , -1.28)
10	20	(0.00 , 3.20)	(2.87 , 0.23)	(2.87 , -0.23)
11	0	(0.00 , -179.85)	(62.60 , 24.33)	(62.60 , -24.33)
11	1	(0.00 , 5.16)	(-10.99 , -11.81)	(-10.99 , 11.81)
11	2	(0.00 , 16.35)	(20.18 , -4.82)	(20.18 , 4.82)

11	3	(	0.00 ,	-43.30)	(	-51.05 ,	-30.44)	(	-51.05 ,	30.44)
11	4	(	0.00 ,	-0.56)	(	9.51 ,	-0.92)	(	9.51 ,	0.92)
11	5	(	0.00 ,	20.95)	(	6.15 ,	-11.49)	(	6.15 ,	11.49)
11	6	(	0.00 ,	2.28)	(	3.06 ,	-6.00)	(	3.06 ,	6.00)
11	7	(	0.00 ,	-6.65)	(	-7.36 ,	0.08)	(	-7.36 ,	-0.08)
11	8	(	0.00 ,	-10.43)	(	-12.16 ,	-10.29)	(	-12.16 ,	10.29)
11	9	(	0.00 ,	120.96)	(	147.03 ,	44.06)	(	147.03 ,	-44.06)
11	10	(	0.00 ,	-20.16)	(	-30.09 ,	-8.53)	(	-30.09 ,	8.53)
11	11	(	0.00 ,	-44.61)	(	-53.90 ,	-12.46)	(	-53.90 ,	12.46)
11	12	(	0.00 ,	26.78)	(	29.44 ,	16.01)	(	29.44 ,	-16.01)
11	13	(	0.00 ,	26.52)	(	26.13 ,	-4.54)	(	26.13 ,	4.54)
11	14	(	0.00 ,	-22.32)	(	-13.28 ,	-2.76)	(	-13.28 ,	2.76)
11	15	(	0.00 ,	12.69)	(	-12.12 ,	-7.33)	(	-12.12 ,	7.33)
11	16	(	0.00 ,	3.99)	(	-1.90 ,	-26.46)	(	-1.90 ,	26.46)
11	17	(	0.00 ,	0.78)	(	-7.41 ,	-17.38)	(	-7.41 ,	17.38)
11	18	(	0.00 ,	11.46)	(	16.02 ,	-55.84)	(	16.02 ,	55.84)
11	19	(	0.00 ,	17.71)	(	8.36 ,	-18.93)	(	8.36 ,	18.93)
11	20	(	0.00 ,	6.64)	(	-6.05 ,	-2.78)	(	-6.05 ,	2.78)
12	0	(	0.00 ,	-26.45)	(	-6.21 ,	-14.75)	(	-6.21 ,	14.75)
12	1	(	0.00 ,	5.97)	(	-9.95 ,	-8.61)	(	-9.95 ,	8.61)
12	2	(	0.00 ,	-18.88)	(	18.66 ,	6.15)	(	18.66 ,	-6.15)
12	3	(	0.00 ,	16.60)	(	43.43 ,	17.20)	(	43.43 ,	-17.20)
12	4	(	0.00 ,	-0.38)	(	7.52 ,	15.38)	(	7.52 ,	-15.38)
12	5	(	0.00 ,	-5.35)	(	0.36 ,	1.84)	(	0.36 ,	-1.84)
12	6	(	0.00 ,	4.44)	(	0.41 ,	-6.01)	(	0.41 ,	6.01)
12	7	(	0.00 ,	22.39)	(	-5.06 ,	-14.89)	(	-5.06 ,	14.89)
12	8	(	0.00 ,	5.87)	(	-1.47 ,	-10.12)	(	-1.47 ,	10.12)
12	9	(	0.00 ,	-13.45)	(	-8.33 ,	2.28)	(	-8.33 ,	-2.28)
12	10	(	0.00 ,	20.66)	(	38.39 ,	10.97)	(	38.39 ,	-10.97)
12	11	(	0.00 ,	-7.87)	(	-15.15 ,	-2.29)	(	-15.15 ,	2.29)
12	12	(	0.00 ,	-6.33)	(	-2.15 ,	7.36)	(	-2.15 ,	-7.36)
12	13	(	0.00 ,	27.40)	(	41.97 ,	16.83)	(	41.97 ,	-16.83)
12	14	(	0.00 ,	1.88)	(	-6.95 ,	-6.69)	(	-6.95 ,	6.69)
12	15	(	0.00 ,	-27.66)	(	-7.33 ,	-5.83)	(	-7.33 ,	5.83)
12	16	(	0.00 ,	3.76)	(	-0.71 ,	7.39)	(	-0.71 ,	-7.39)
12	17	(	0.00 ,	-15.75)	(	-9.51 ,	-13.24)	(	-9.51 ,	13.24)
12	18	(	0.00 ,	-24.72)	(	-19.27 ,	-7.08)	(	-19.27 ,	7.08)
12	19	(	0.00 ,	-7.22)	(	8.73 ,	6.88)	(	8.73 ,	-6.88)
12	20	(	0.00 ,	6.02)	(	14.40 ,	-1.82)	(	14.40 ,	1.82)
13	0	(	0.00 ,	-624.85)	(	407.22 ,	-708.55)	(	407.22 ,	708.55)
13	1	(	0.00 ,	15.92)	(	-21.80 ,	-74.57)	(	-21.80 ,	74.57)
13	2	(	0.00 ,	-96.65)	(	3.21 ,	42.28)	(	3.21 ,	-42.28)
13	3	(	0.00 ,	-22.50)	(	14.55 ,	-195.75)	(	14.55 ,	195.75)
13	4	(	0.00 ,	-20.35)	(	89.89 ,	0.48)	(	89.89 ,	-0.48)

13	5	(0.00 , 3.48)	(-5.18 , -3.83)	(-5.18 , 3.83)
13	6	(0.00 , -32.64)	(-37.39 , 34.34)	(-37.39 , -34.34)
13	7	(0.00 , 2.37)	(-36.34 , 4.77)	(-36.34 , -4.77)
13	8	(0.00 , -47.01)	(52.23 , -20.21)	(52.23 , 20.21)
13	9	(0.00 , 128.70)	(158.36 , 53.89)	(158.36 , -53.89)
13	10	(0.00 , 1.72)	(-14.61 , -6.96)	(-14.61 , 6.96)
13	11	(0.00 , -29.95)	(-75.39 , -27.62)	(-75.39 , 27.62)
13	12	(0.00 , 15.73)	(33.83 , 10.32)	(33.83 , -10.32)
13	13	(0.00 , 42.59)	(57.20 , -2.76)	(57.20 , 2.76)
13	14	(0.00 , -1.93)	(-11.99 , -6.28)	(-11.99 , 6.28)
13	15	(0.00 , -20.33)	(-9.37 , 0.57)	(-9.37 , -0.57)
13	16	(0.00 , 3.88)	(-14.88 , -30.42)	(-14.88 , 30.42)
13	17	(0.00 , 6.16)	(-16.25 , -32.29)	(-16.25 , 32.29)
13	18	(0.00 , 46.95)	(-2.22 , -75.55)	(-2.22 , 75.55)
13	19	(0.00 , 5.54)	(0.17 , -19.73)	(0.17 , 19.73)
13	20	(0.00 , -2.34)	(11.34 , 3.09)	(11.34 , -3.09)
14	0	(0.00 , 531.67)	(-565.37 , 1244.73)	(-565.37 , -1244.73)
14	1	(0.00 , 66.80)	(32.55 , -8.75)	(32.55 , 8.75)
14	2	(0.00 , -0.75)	(106.88 , -62.71)	(106.88 , 62.71)
14	3	(0.00 , -45.05)	(0.22 , 272.12)	(0.22 , -272.12)
14	4	(0.00 , -56.55)	(-18.60 , 56.08)	(-18.60 , -56.08)
14	5	(0.00 , -1.97)	(13.47 , 0.54)	(13.47 , -0.54)
14	6	(0.00 , -45.34)	(-83.06 , -107.12)	(-83.06 , 107.12)
14	7	(0.00 , -34.91)	(-10.74 , -29.41)	(-10.74 , 29.41)
14	8	(0.00 , 154.48)	(29.69 , 62.78)	(29.69 , -62.78)
14	9	(0.00 , 62.99)	(164.02 , 49.36)	(164.02 , -49.36)
14	10	(0.00 , -52.66)	(-47.10 , -8.79)	(-47.10 , 8.79)
14	11	(0.00 , -36.42)	(-37.47 , 0.93)	(-37.47 , -0.93)
14	12	(0.00 , 9.85)	(43.58 , 25.64)	(43.58 , -25.64)
14	13	(0.00 , 26.72)	(21.26 , 20.67)	(21.26 , -20.67)
14	14	(0.00 , -2.80)	(-2.84 , 1.43)	(-2.84 , -1.43)
14	15	(0.00 , -2.49)	(-2.63 , 2.23)	(-2.63 , -2.23)
14	16	(0.00 , 9.11)	(-9.96 , -8.27)	(-9.96 , 8.27)
14	17	(0.00 , -9.21)	(-21.02 , -9.14)	(-21.02 , 9.14)
14	18	(0.00 , 34.49)	(-0.83 , 5.99)	(-0.83 , -5.99)
14	19	(0.00 , 42.64)	(43.35 , 24.11)	(43.35 , -24.11)
14	20	(0.00 , 14.92)	(-37.07 , -19.91)	(-37.07 , 19.91)
15	0	(0.00 , 510.40)	(-316.05 , 733.90)	(-316.05 , -733.90)
15	1	(0.00 , 19.57)	(95.74 , 43.11)	(95.74 , -43.11)
15	2	(0.00 , 130.46)	(62.13 , -14.86)	(62.13 , 14.86)
15	3	(0.00 , -42.07)	(-130.08 , 123.66)	(-130.08 , -123.66)
15	4	(0.00 , -37.12)	(33.26 , -31.56)	(33.26 , 31.56)
15	5	(0.00 , 14.45)	(24.18 , 12.41)	(24.18 , -12.41)
15	6	(0.00 , 92.58)	(131.06 , -1.07)	(131.06 , 1.07)

15	7	(0.00 , -25.01)	(-7.96 , -12.45)	(-7.96 , 12.45)
15	8	(0.00 , 69.91)	(9.97 , 34.10)	(9.97 , -34.10)
15	9	(0.00 , 98.68)	(205.29 , 50.26)	(205.29 , -50.26)
15	10	(0.00 , -74.58)	(-116.90 , -19.82)	(-116.90 , 19.82)
15	11	(0.00 , -42.48)	(-34.89 , -1.41)	(-34.89 , 1.41)
15	12	(0.00 , 22.73)	(33.83 , 15.14)	(33.83 , -15.14)
15	13	(0.00 , -1.15)	(-23.89 , -22.59)	(-23.89 , 22.59)
15	14	(0.00 , -17.07)	(10.41 , 5.60)	(10.41 , -5.60)
15	15	(0.00 , 46.14)	(-1.14 , 12.62)	(-1.14 , -12.62)
15	16	(0.00 , -1.82)	(38.78 , 2.19)	(38.78 , -2.19)
15	17	(0.00 , 43.90)	(40.83 , -17.21)	(40.83 , 17.21)
15	18	(0.00 , 32.52)	(99.58 , -17.11)	(99.58 , 17.11)
15	19	(0.00 , -1.66)	(30.90 , 0.88)	(30.90 , -0.88)
15	20	(0.00 , 6.38)	(-53.87 , 1.42)	(-53.87 , -1.42)
16	0	(0.00 , -669.97)	(444.79 , -867.57)	(444.79 , 867.57)
16	1	(0.00 , -41.16)	(-62.47 , -3.64)	(-62.47 , 3.64)
16	2	(0.00 , 19.67)	(-59.44 , 26.94)	(-59.44 , -26.94)
16	3	(0.00 , -8.90)	(33.31 , -165.26)	(33.31 , 165.26)
16	4	(0.00 , 53.57)	(-61.46 , -11.61)	(-61.46 , 11.61)
16	5	(0.00 , -2.16)	(2.54 , -1.61)	(2.54 , 1.61)
16	6	(0.00 , -85.76)	(-107.37 , 37.33)	(-107.37 , -37.33)
16	7	(0.00 , 13.68)	(-29.32 , 3.58)	(-29.32 , -3.58)
16	8	(0.00 , 2.76)	(147.47 , 13.92)	(147.47 , -13.92)
16	9	(0.00 , 108.08)	(192.00 , 51.49)	(192.00 , -51.49)
16	10	(0.00 , -112.20)	(-158.09 , -63.83)	(-158.09 , 63.83)
16	11	(0.00 , 30.49)	(-4.58 , -11.19)	(-4.58 , 11.19)
16	12	(0.00 , 17.66)	(55.17 , 15.73)	(55.17 , -15.73)
16	13	(0.00 , -97.15)	(-97.98 , -34.36)	(-97.98 , 34.36)
16	14	(0.00 , 9.14)	(22.47 , 10.84)	(22.47 , -10.84)
16	15	(0.00 , 16.00)	(35.20 , -13.86)	(35.20 , 13.86)
16	16	(0.00 , -25.80)	(-17.69 , -9.48)	(-17.69 , 9.48)
16	17	(0.00 , -20.82)	(-5.03 , -6.21)	(-5.03 , 6.21)
16	18	(0.00 , -58.35)	(19.09 , -24.50)	(19.09 , 24.50)
16	19	(0.00 , -13.69)	(-45.92 , -33.21)	(-45.92 , 33.21)
16	20	(0.00 , -6.33)	(-30.84 , -12.83)	(-30.84 , 12.83)
17	0	(0.00 , -43.20)	(98.39 , -205.64)	(98.39 , 205.64)
17	1	(0.00 , -39.79)	(-40.47 , -17.83)	(-40.47 , 17.83)
17	2	(0.00 , -8.98)	(-12.15 , 19.35)	(-12.15 , -19.35)
17	3	(0.00 , -39.19)	(-48.95 , -32.64)	(-48.95 , 32.64)
17	4	(0.00 , 28.51)	(-49.85 , 4.48)	(-49.85 , -4.48)
17	5	(0.00 , -1.92)	(-8.11 , -3.86)	(-8.11 , 3.86)
17	6	(0.00 , -63.61)	(-112.13 , -23.76)	(-112.13 , 23.76)
17	7	(0.00 , 15.80)	(33.95 , 10.99)	(33.95 , -10.99)
17	8	(0.00 , -30.69)	(-36.48 , -10.09)	(-36.48 , 10.09)

17	9	(0.00 , 22.93)	(-10.46 , 11.71)	(-10.46 , -11.71)
17	10	(0.00 , -24.78)	(-58.40 , -20.45)	(-58.40 , 20.45)
17	11	(0.00 , 35.28)	(45.66 , 9.70)	(45.66 , -9.70)
17	12	(0.00 , -1.21)	(12.22 , 2.73)	(12.22 , -2.73)
17	13	(0.00 , -67.58)	(-86.07 , -19.04)	(-86.07 , 19.04)
17	14	(0.00 , 5.34)	(12.09 , 4.35)	(12.09 , -4.35)
17	15	(0.00 , 53.57)	(22.98 , 7.36)	(22.98 , -7.36)
17	16	(0.00 , -13.77)	(-3.96 , 15.90)	(-3.96 , -15.90)
17	17	(0.00 , 22.20)	(-2.06 , 23.57)	(-2.06 , -23.57)
17	18	(0.00 , -14.62)	(-20.34 , 62.38)	(-20.34 , -62.38)
17	19	(0.00 , -0.93)	(-43.32 , -0.25)	(-43.32 , 0.25)
17	20	(0.00 , -16.89)	(-11.90 , 3.37)	(-11.90 , -3.37)
18	0	(0.00 , 478.84)	(-144.90 , 123.39)	(-144.90 , -123.39)
18	1	(0.00 , 15.98)	(25.70 , 13.63)	(25.70 , -13.63)
18	2	(0.00 , -15.78)	(31.04 , 4.26)	(31.04 , -4.26)
18	3	(0.00 , 1.68)	(-77.55 , 13.92)	(-77.55 , -13.92)
18	4	(0.00 , 19.56)	(17.71 , -26.42)	(17.71 , 26.42)
18	5	(0.00 , -12.40)	(-17.37 , 1.74)	(-17.37 , -1.74)
18	6	(0.00 , -123.60)	(-178.26 , -79.55)	(-178.26 , 79.55)
18	7	(0.00 , 9.86)	(49.32 , 9.34)	(49.32 , -9.34)
18	8	(0.00 , 25.96)	(-10.96 , -2.78)	(-10.96 , 2.78)
18	9	(0.00 , -21.24)	(-100.00 , -35.57)	(-100.00 , 35.57)
18	10	(0.00 , -61.43)	(-120.82 , -28.07)	(-120.82 , 28.07)
18	11	(0.00 , 43.10)	(104.75 , 37.12)	(104.75 , -37.12)
18	12	(0.00 , -1.68)	(9.85 , -0.69)	(9.85 , 0.69)
18	13	(0.00 , -84.29)	(-169.52 , -59.09)	(-169.52 , 59.09)
18	14	(0.00 , 5.09)	(35.07 , 13.58)	(35.07 , -13.58)
18	15	(0.00 , 40.38)	(28.23 , 14.93)	(28.23 , -14.93)
18	16	(0.00 , -28.37)	(5.30 , -10.54)	(5.30 , 10.54)
18	17	(0.00 , 10.83)	(48.18 , 2.09)	(48.18 , -2.09)
18	18	(0.00 , -58.00)	(75.28 , -17.82)	(75.28 , 17.82)
18	19	(0.00 , 0.28)	(-48.38 , -2.24)	(-48.38 , 2.24)
18	20	(0.00 , -4.55)	(-41.48 , -0.79)	(-41.48 , 0.79)
19	0	(0.00 , -948.26)	(159.78 , 486.30)	(159.78 , -486.30)
19	1	(0.00 , 5.21)	(21.37 , -19.57)	(21.37 , 19.57)
19	2	(0.00 , 2.94)	(-44.04 , -49.16)	(-44.04 , 49.16)
19	3	(0.00 , -79.79)	(-90.73 , -4.32)	(-90.73 , 4.32)
19	4	(0.00 , -43.30)	(-72.01 , 70.27)	(-72.01 , -70.27)
19	5	(0.00 , 13.67)	(13.06 , -9.49)	(13.06 , 9.49)
19	6	(0.00 , 125.81)	(173.43 , 54.16)	(173.43 , -54.16)
19	7	(0.00 , -15.88)	(-21.36 , -27.22)	(-21.36 , 27.22)
19	8	(0.00 , 21.41)	(16.67 , 25.78)	(16.67 , -25.78)
19	9	(0.00 , 12.16)	(5.48 , 6.72)	(5.48 , -6.72)
19	10	(0.00 , 49.18)	(97.54 , 0.70)	(97.54 , -0.70)

19	11	(0.00 ,	-13.48)	(-45.05 , -36.93)	(-45.05 , 36.93)
19	12	(0.00 ,	-0.02)	(-21.53 , 6.26)	(-21.53 , -6.26)
19	13	(0.00 ,	45.87)	(83.36 , 20.19)	(83.36 , -20.19)
19	14	(0.00 ,	-13.12)	(-11.97 , -9.29)	(-11.97 , 9.29)
19	15	(0.00 ,	40.44)	(-35.77 , -24.98)	(-35.77 , 24.98)
19	16	(0.00 ,	-6.28)	(-43.41 , -13.39)	(-43.41 , 13.39)
19	17	(0.00 ,	12.45)	(-99.49 , 24.88)	(-99.49 , -24.88)
19	18	(0.00 ,	52.06)	(-177.67 , 23.19)	(-177.67 , -23.19)
19	19	(0.00 ,	21.24)	(40.45 , -7.15)	(40.45 , 7.15)
19	20	(0.00 ,	-20.17)	(25.73 , 6.73)	(25.73 , -6.73)
20	0	(0.00 ,	361.93)	(-86.51 , 31.60)	(-86.51 , -31.60)
20	1	(0.00 ,	28.42)	(1.45 , -9.25)	(1.45 , 9.25)
20	2	(0.00 ,	-83.70)	(-10.02 , -17.70)	(-10.02 , 17.70)
20	3	(0.00 ,	30.36)	(76.52 , 5.78)	(76.52 , -5.78)
20	4	(0.00 ,	-35.51)	(8.06 , -48.76)	(8.06 , 48.76)
20	5	(0.00 ,	22.50)	(24.35 , 9.53)	(24.35 , -9.53)
20	6	(0.00 ,	194.44)	(312.38 , 84.40)	(312.38 , -84.40)
20	7	(0.00 ,	-22.11)	(-27.09 , 0.26)	(-27.09 , -0.26)
20	8	(0.00 ,	89.13)	(126.71 , 21.63)	(126.71 , -21.63)
20	9	(0.00 ,	-17.94)	(-44.62 , -18.24)	(-44.62 , 18.24)
20	10	(0.00 ,	-50.64)	(-149.80 , -16.92)	(-149.80 , 16.92)
20	11	(0.00 ,	43.23)	(74.43 , 34.22)	(74.43 , -34.22)
20	12	(0.00 ,	11.76)	(-25.83 , -8.82)	(-25.83 , 8.82)
20	13	(0.00 ,	-58.35)	(-136.81 , -35.63)	(-136.81 , 35.63)
20	14	(0.00 ,	2.40)	(35.12 , 11.03)	(35.12 , -11.03)
20	15	(0.00 ,	-4.71)	(51.47 , 23.54)	(51.47 , -23.54)
20	16	(0.00 ,	-6.89)	(11.26 , 3.80)	(11.26 , -3.80)
20	17	(0.00 ,	-17.32)	(60.80 , -6.79)	(60.80 , 6.79)
20	18	(0.00 ,	-15.79)	(97.73 , 8.21)	(97.73 , -8.21)
20	19	(0.00 ,	-56.82)	(-17.18 , 2.53)	(-17.18 , -2.53)
20	20	(0.00 ,	-14.96)	(-26.27 , -12.84)	(-26.27 , 12.84)

Pt-B

T	S	MS= 0		-1		+1	
1	0	(0.00 ,	8.04)	(23.35 ,	36.05)	(23.35 ,	-36.05)
1	1	(0.00 ,	-82.14)	(42.36 ,	-0.43)	(42.36 ,	0.43)
1	2	(0.00 ,	-694.48)	(819.90 ,	-63.27)	(819.90 ,	63.27)
1	3	(0.00 ,	-905.22)	(148.38 ,	33.27)	(148.38 ,	-33.27)
1	4	(0.00 ,	489.07)	(-7.19 ,	5.68)	(-7.19 ,	-5.68)
1	5	(0.00 ,	45.48)	(-107.36 ,	-69.33)	(-107.36 ,	69.33)
1	6	(0.00 ,	89.09)	(32.74 ,	-25.37)	(32.74 ,	25.37)
1	7	(0.00 ,	-236.86)	(356.89 ,	-12.13)	(356.89 ,	12.13)
1	8	(0.00 ,	-112.94)	(105.27 ,	-50.64)	(105.27 ,	50.64)

1	9	(0.00 , 62.65)	(36.75 , -4.29)	(36.75 , 4.29)
1	10	(0.00 , 17.30)	(2.70 , -65.04)	(2.70 , 65.04)
1	11	(0.00 , 24.78)	(-65.29 , -20.63)	(-65.29 , 20.63)
1	12	(0.00 , 48.53)	(-111.04 , 124.86)	(-111.04 , -124.86)
1	13	(0.00 , -160.50)	(314.59 , 33.15)	(314.59 , -33.15)
1	14	(0.00 , -123.25)	(261.66 , -39.79)	(261.66 , 39.79)
1	15	(0.00 , 117.83)	(-362.64 , 50.60)	(-362.64 , -50.60)
1	16	(0.00 , -27.38)	(41.91 , -9.82)	(41.91 , 9.82)
1	17	(0.00 , 132.06)	(-307.11 , -0.84)	(-307.11 , 0.84)
1	18	(0.00 , -419.54)	(370.32 , -18.00)	(370.32 , 18.00)
1	19	(0.00 , 50.06)	(-27.49 , -5.20)	(-27.49 , 5.20)
1	20	(0.00 , -42.38)	(23.48 , -0.83)	(23.48 , 0.83)
2	0	(0.00 , -198.11)	(-37.12 , -11.31)	(-37.12 , 11.31)
2	1	(0.00 , -395.22)	(-92.38 , 78.61)	(-92.38 , -78.61)
2	2	(0.00 , 132.72)	(-79.71 , 548.93)	(-79.71 , -548.93)
2	3	(0.00 , 160.80)	(-17.60 , 228.76)	(-17.60 , -228.76)
2	4	(0.00 , 2.74)	(-78.85 , -38.90)	(-78.85 , 38.90)
2	5	(0.00 , 436.10)	(-418.86 , -12.61)	(-418.86 , 12.61)
2	6	(0.00 , 542.27)	(-17.42 , -48.83)	(-17.42 , 48.83)
2	7	(0.00 , -17.73)	(67.41 , 46.08)	(67.41 , -46.08)
2	8	(0.00 , 94.42)	(-220.87 , 65.01)	(-220.87 , -65.01)
2	9	(0.00 , 26.38)	(6.93 , 14.84)	(6.93 , -14.84)
2	10	(0.00 , 21.02)	(-36.27 , -1.19)	(-36.27 , 1.19)
2	11	(0.00 , 49.79)	(4.93 , 17.03)	(4.93 , -17.03)
2	12	(0.00 , -74.23)	(73.48 , 29.52)	(73.48 , -29.52)
2	13	(0.00 , -63.62)	(-39.43 , -113.45)	(-39.43 , 113.45)
2	14	(0.00 , 31.10)	(-60.45 , -51.26)	(-60.45 , 51.26)
2	15	(0.00 , 6.04)	(106.81 , 131.70)	(106.81 , -131.70)
2	16	(0.00 , -37.11)	(-9.27 , -6.43)	(-9.27 , 6.43)
2	17	(0.00 , 46.65)	(42.12 , 24.41)	(42.12 , -24.41)
2	18	(0.00 , 56.71)	(-87.83 , -111.39)	(-87.83 , 111.39)
2	19	(0.00 , -120.03)	(-79.75 , 57.40)	(-79.75 , -57.40)
2	20	(0.00 , -35.98)	(67.97 , -22.61)	(67.97 , 22.61)
3	0	(0.00 , -0.00)	(112.14 , -113.32)	(112.14 , 113.32)
3	1	(0.00 , 124.12)	(-864.71 , 149.26)	(-864.71 , -149.26)
3	2	(0.00 , 67.71)	(59.73 , 650.74)	(59.73 , -650.74)
3	3	(0.00 , 56.17)	(113.50 , 970.80)	(113.50 , -970.80)
3	4	(0.00 , -113.17)	(68.07 , -399.66)	(68.07 , 399.66)
3	5	(0.00 , -328.82)	(279.22 , 9.02)	(279.22 , -9.02)
3	6	(0.00 , -400.61)	(55.73 , -125.96)	(55.73 , 125.96)
3	7	(0.00 , 4.88)	(-109.30 , -45.50)	(-109.30 , 45.50)
3	8	(0.00 , 30.67)	(124.99 , 49.42)	(124.99 , -49.42)
3	9	(0.00 , -20.17)	(15.19 , -62.12)	(15.19 , 62.12)
3	10	(0.00 , 11.57)	(27.65 , 66.51)	(27.65 , -66.51)

3	11	(0.00 , -7.46)	(15.38 , 69.96)	(15.38 , -69.96)
3	12	(0.00 , -29.49)	(146.55 , 175.40)	(146.55 , -175.40)
3	13	(0.00 , -143.21)	(-130.89 , -288.35)	(-130.89 , 288.35)
3	14	(0.00 , -19.03)	(-30.74 , -170.96)	(-30.74 , 170.96)
3	15	(0.00 , -19.02)	(126.56 , 346.58)	(126.56 , -346.58)
3	16	(0.00 , 35.68)	(-0.61 , -20.36)	(-0.61 , 20.36)
3	17	(0.00 , -0.69)	(61.49 , 404.57)	(61.49 , -404.57)
3	18	(0.00 , 4.74)	(-50.62 , -157.31)	(-50.62 , 157.31)
3	19	(0.00 , 76.21)	(-128.47 , 47.85)	(-128.47 , -47.85)
3	20	(0.00 , 43.74)	(-55.77 , -40.80)	(-55.77 , 40.80)
4	0	(0.00 , -7.01)	(7.89 , 5.27)	(7.89 , -5.27)
4	1	(0.00 , 38.50)	(-5.22 , -1.93)	(-5.22 , 1.93)
4	2	(0.00 , -29.30)	(16.81 , -39.92)	(16.81 , 39.92)
4	3	(0.00 , -11.81)	(18.24 , -0.26)	(18.24 , 0.26)
4	4	(0.00 , 41.19)	(22.19 , -20.94)	(22.19 , 20.94)
4	5	(0.00 , -8.27)	(-7.93 , -64.39)	(-7.93 , 64.39)
4	6	(0.00 , -6.70)	(0.60 , -30.69)	(0.60 , 30.69)
4	7	(0.00 , -6.75)	(9.27 , 3.41)	(9.27 , -3.41)
4	8	(0.00 , -6.51)	(1.92 , -20.84)	(1.92 , 20.84)
4	9	(0.00 , 1.52)	(3.92 , -16.13)	(3.92 , 16.13)
4	10	(0.00 , -33.60)	(-29.23 , 16.52)	(-29.23 , -16.52)
4	11	(0.00 , -8.19)	(-6.35 , 6.53)	(-6.35 , -6.53)
4	12	(0.00 , -9.71)	(-8.80 , -54.25)	(-8.80 , 54.25)
4	13	(0.00 , -5.65)	(3.77 , -35.00)	(3.77 , 35.00)
4	14	(0.00 , -7.84)	(1.08 , -3.92)	(1.08 , 3.92)
4	15	(0.00 , -10.86)	(-7.29 , -13.93)	(-7.29 , 13.93)
4	16	(0.00 , -7.19)	(1.29 , 0.55)	(1.29 , -0.55)
4	17	(0.00 , 12.70)	(-15.02 , 8.84)	(-15.02 , -8.84)
4	18	(0.00 , 0.77)	(17.18 , 9.72)	(17.18 , -9.72)
4	19	(0.00 , 9.05)	(1.69 , -2.51)	(1.69 , 2.51)
4	20	(0.00 , -9.79)	(-9.08 , 2.86)	(-9.08 , -2.86)
5	0	(0.00 , 48.77)	(-11.76 , -3.03)	(-11.76 , 3.03)
5	1	(0.00 , -1431.26)	(567.99 , -6.85)	(567.99 , 6.85)
5	2	(0.00 , 217.59)	(-29.35 , 1045.57)	(-29.35 , -1045.57)
5	3	(0.00 , 35.32)	(-91.13 , -476.64)	(-91.13 , 476.64)
5	4	(0.00 , -188.43)	(-18.14 , 434.56)	(-18.14 , -434.56)
5	5	(0.00 , -104.50)	(129.81 , 137.36)	(129.81 , -137.36)
5	6	(0.00 , -52.71)	(-9.02 , 78.27)	(-9.02 , -78.27)
5	7	(0.00 , 17.79)	(-41.47 , 187.86)	(-41.47 , -187.86)
5	8	(0.00 , 6.08)	(22.19 , 141.50)	(22.19 , -141.50)
5	9	(0.00 , 28.63)	(-13.15 , 131.11)	(-13.15 , -131.11)
5	10	(0.00 , 42.86)	(-11.91 , -89.98)	(-11.91 , 89.98)
5	11	(0.00 , 35.22)	(-4.37 , -41.41)	(-4.37 , 41.41)
5	12	(0.00 , 57.57)	(46.53 , -63.85)	(46.53 , 63.85)

5	13	(0.00 , -250.89)	(63.37 , 13.34)	(63.37 , -13.34)
5	14	(0.00 , -34.17)	(-0.21 , 70.76)	(-0.21 , -70.76)
5	15	(0.00 , 99.25)	(-56.05 , -231.54)	(-56.05 , 231.54)
5	16	(0.00 , 17.81)	(-4.25 , 19.71)	(-4.25 , -19.71)
5	17	(0.00 , -70.85)	(47.47 , -85.41)	(47.47 , 85.41)
5	18	(0.00 , -41.94)	(-38.90 , -137.08)	(-38.90 , 137.08)
5	19	(0.00 , -252.74)	(118.15 , 51.98)	(118.15 , -51.98)
5	20	(0.00 , -1.82)	(-19.38 , -13.79)	(-19.38 , 13.79)
6	0	(0.00 , -76.02)	(-47.80 , -109.72)	(-47.80 , 109.72)
6	1	(0.00 , 454.48)	(-238.02 , -6.72)	(-238.02 , 6.72)
6	2	(0.00 , 35.70)	(-21.09 , -252.35)	(-21.09 , 252.35)
6	3	(0.00 , -28.34)	(-64.51 , 196.49)	(-64.51 , -196.49)
6	4	(0.00 , -55.88)	(-225.55 , -51.18)	(-225.55 , 51.18)
6	5	(0.00 , 287.29)	(-165.36 , 363.76)	(-165.36 , -363.76)
6	6	(0.00 , 263.22)	(-9.86 , 283.67)	(-9.86 , -283.67)
6	7	(0.00 , -14.42)	(13.03 , -74.35)	(13.03 , 74.35)
6	8	(0.00 , 33.38)	(-99.32 , 5.36)	(-99.32 , -5.36)
6	9	(0.00 , 1.69)	(-0.08 , -24.25)	(-0.08 , 24.25)
6	10	(0.00 , -22.72)	(17.18 , 10.39)	(17.18 , -10.39)
6	11	(0.00 , 2.11)	(26.08 , -6.40)	(26.08 , 6.40)
6	12	(0.00 , -39.78)	(34.19 , -32.33)	(34.19 , 32.33)
6	13	(0.00 , 48.64)	(-77.48 , -5.77)	(-77.48 , 5.77)
6	14	(0.00 , -28.05)	(-71.95 , -26.61)	(-71.95 , 26.61)
6	15	(0.00 , 56.06)	(40.09 , 133.51)	(40.09 , -133.51)
6	16	(0.00 , -27.61)	(-1.22 , -15.24)	(-1.22 , 15.24)
6	17	(0.00 , -32.00)	(86.32 , 3.37)	(86.32 , -3.37)
6	18	(0.00 , -37.14)	(-77.55 , 33.79)	(-77.55 , -33.79)
6	19	(0.00 , 65.89)	(-96.84 , -71.67)	(-96.84 , 71.67)
6	20	(0.00 , -5.97)	(41.12 , 30.87)	(41.12 , -30.87)
7	0	(0.00 , -82.74)	(-80.56 , 97.88)	(-80.56 , -97.88)
7	1	(0.00 , 110.75)	(187.23 , -30.65)	(187.23 , 30.65)
7	2	(0.00 , 271.56)	(-326.32 , -217.12)	(-326.32 , 217.12)
7	3	(0.00 , 224.91)	(-142.23 , -171.37)	(-142.23 , 171.37)
7	4	(0.00 , -378.46)	(-182.18 , 143.19)	(-182.18 , -143.19)
7	5	(0.00 , 498.42)	(-292.61 , 478.19)	(-292.61 , -478.19)
7	6	(0.00 , 407.57)	(-50.21 , 103.12)	(-50.21 , -103.12)
7	7	(0.00 , 43.73)	(-33.61 , -86.22)	(-33.61 , 86.22)
7	8	(0.00 , 107.37)	(-198.05 , 133.16)	(-198.05 , -133.16)
7	9	(0.00 , -17.31)	(-17.30 , 2.64)	(-17.30 , -2.64)
7	10	(0.00 , 16.08)	(0.67 , -3.37)	(0.67 , 3.37)
7	11	(0.00 , 34.37)	(39.74 , -9.95)	(39.74 , 9.95)
7	12	(0.00 , -45.89)	(13.48 , -91.44)	(13.48 , 91.44)
7	13	(0.00 , 137.93)	(-89.28 , 78.27)	(-89.28 , -78.27)
7	14	(0.00 , -1.71)	(-123.63 , 18.39)	(-123.63 , -18.39)

7	15	(0.00 , -2.58)	(55.26 , -4.18)	(55.26 , 4.18)
7	16	(0.00 , -27.53)	(-12.14 , 14.95)	(-12.14 , -14.95)
7	17	(0.00 , -137.65)	(152.89 , -195.35)	(152.89 , 195.35)
7	18	(0.00 , 142.65)	(-136.08 , 44.53)	(-136.08 , -44.53)
7	19	(0.00 , -29.66)	(-23.71 , 10.46)	(-23.71 , -10.46)
7	20	(0.00 , 6.43)	(74.08 , 27.70)	(74.08 , -27.70)
8	0	(0.00 , -110.48)	(-25.53 , 15.27)	(-25.53 , -15.27)
8	1	(0.00 , 812.39)	(-593.72 , 64.86)	(-593.72 , -64.86)
8	2	(0.00 , 140.01)	(-212.86 , -250.12)	(-212.86 , 250.12)
8	3	(0.00 , 180.21)	(-8.52 , 449.23)	(-8.52 , -449.23)
8	4	(0.00 , -298.87)	(-50.68 , -177.61)	(-50.68 , 177.61)
8	5	(0.00 , 343.49)	(-240.83 , 269.77)	(-240.83 , -269.77)
8	6	(0.00 , 295.58)	(-25.53 , -62.78)	(-25.53 , 62.78)
8	7	(0.00 , 44.03)	(-33.98 , -147.85)	(-33.98 , 147.85)
8	8	(0.00 , 66.33)	(-142.81 , 77.78)	(-142.81 , -77.78)
8	9	(0.00 , -35.17)	(3.82 , -69.34)	(3.82 , 69.34)
8	10	(0.00 , -8.97)	(11.62 , 60.00)	(11.62 , -60.00)
8	11	(0.00 , -2.41)	(33.09 , 49.30)	(33.09 , -49.30)
8	12	(0.00 , -92.29)	(72.12 , 16.04)	(72.12 , -16.04)
8	13	(0.00 , 166.47)	(-145.27 , -57.41)	(-145.27 , 57.41)
8	14	(0.00 , 51.92)	(-90.92 , -33.90)	(-90.92 , 33.90)
8	15	(0.00 , -92.54)	(132.39 , 251.36)	(132.39 , -251.36)
8	16	(0.00 , -23.38)	(-8.10 , 5.43)	(-8.10 , -5.43)
8	17	(0.00 , -81.00)	(107.16 , 79.03)	(107.16 , -79.03)
8	18	(0.00 , 168.57)	(-108.03 , 30.01)	(-108.03 , -30.01)
8	19	(0.00 , 115.60)	(-143.43 , 30.35)	(-143.43 , -30.35)
8	20	(0.00 , -5.75)	(29.97 , -7.23)	(29.97 , 7.23)
9	0	(0.00 , -141.21)	(-16.76 , 19.33)	(-16.76 , -19.33)
9	1	(0.00 , 1.35)	(120.45 , -21.84)	(120.45 , 21.84)
9	2	(0.00 , 429.65)	(-621.89 , -41.46)	(-621.89 , 41.46)
9	3	(0.00 , 865.69)	(13.76 , -203.95)	(13.76 , 203.95)
9	4	(0.00 , 299.74)	(272.05 , -172.86)	(272.05 , 172.86)
9	5	(0.00 , 6.97)	(-247.91 , -1018.61)	(-247.91 , 1018.61)
9	6	(0.00 , 205.73)	(-34.26 , -387.52)	(-34.26 , 387.52)
9	7	(0.00 , 144.78)	(-183.40 , 136.09)	(-183.40 , -136.09)
9	8	(0.00 , 40.22)	(-192.76 , -198.56)	(-192.76 , 198.56)
9	9	(0.00 , -13.91)	(-13.47 , -3.22)	(-13.47 , 3.22)
9	10	(0.00 , -0.12)	(-44.06 , 32.53)	(-44.06 , -32.53)
9	11	(0.00 , 56.28)	(27.16 , 7.01)	(27.16 , -7.01)
9	12	(0.00 , -30.17)	(6.14 , -10.51)	(6.14 , 10.51)
9	13	(0.00 , 192.63)	(-232.17 , -4.25)	(-232.17 , 4.25)
9	14	(0.00 , 208.89)	(-154.15 , 41.83)	(-154.15 , -41.83)
9	15	(0.00 , -171.02)	(425.26 , -42.94)	(425.26 , 42.94)
9	16	(0.00 , -1.92)	(-40.73 , -2.06)	(-40.73 , 2.06)

9	17	(0.00 , 187.61)	(72.73 , -120.05)	(72.73 , 120.05)
9	18	(0.00 , 364.74)	(-277.02 , 27.90)	(-277.02 , -27.90)
9	19	(0.00 , -67.59)	(67.36 , 77.34)	(67.36 , -77.34)
9	20	(0.00 , -32.91)	(-0.53 , -43.35)	(-0.53 , 43.35)
10	0	(0.00 , -209.23)	(-82.17 , 116.09)	(-82.17 , -116.09)
10	1	(0.00 , -8.32)	(-22.49 , 35.12)	(-22.49 , -35.12)
10	2	(0.00 , -338.12)	(375.81 , 22.32)	(375.81 , -22.32)
10	3	(0.00 , -419.33)	(94.13 , 38.45)	(94.13 , -38.45)
10	4	(0.00 , 293.90)	(-41.62 , -23.20)	(-41.62 , 23.20)
10	5	(0.00 , 633.12)	(-619.02 , -49.23)	(-619.02 , 49.23)
10	6	(0.00 , 707.05)	(-25.92 , -89.02)	(-25.92 , 89.02)
10	7	(0.00 , -169.19)	(315.80 , -7.38)	(315.80 , 7.38)
10	8	(0.00 , 11.20)	(-209.92 , -8.63)	(-209.92 , 8.63)
10	9	(0.00 , 58.98)	(28.54 , -5.97)	(28.54 , 5.97)
10	10	(0.00 , -85.18)	(-58.65 , -5.74)	(-58.65 , 5.74)
10	11	(0.00 , 86.57)	(3.76 , -8.83)	(3.76 , 8.83)
10	12	(0.00 , 5.18)	(-102.82 , -66.87)	(-102.82 , 66.87)
10	13	(0.00 , 16.05)	(126.04 , -50.02)	(126.04 , 50.02)
10	14	(0.00 , -103.31)	(76.71 , -26.99)	(76.71 , 26.99)
10	15	(0.00 , 105.61)	(-222.43 , 155.61)	(-222.43 , -155.61)
10	16	(0.00 , -82.03)	(12.82 , -3.34)	(12.82 , 3.34)
10	17	(0.00 , -22.31)	(-96.90 , -144.64)	(-96.90 , 144.64)
10	18	(0.00 , -216.94)	(165.46 , -39.23)	(165.46 , 39.23)
10	19	(0.00 , 14.57)	(-108.21 , 54.77)	(-108.21 , -54.77)
10	20	(0.00 , -50.43)	(107.23 , -15.49)	(107.23 , 15.49)
11	0	(0.00 , 52.75)	(47.88 , 730.91)	(47.88 , -730.91)
11	1	(0.00 , -22.26)	(66.08 , -63.50)	(66.08 , 63.50)
11	2	(0.00 , 113.39)	(-55.23 , 47.69)	(-55.23 , -47.69)
11	3	(0.00 , -727.06)	(499.95 , -63.80)	(499.95 , 63.80)
11	4	(0.00 , -1315.35)	(1041.95 , 86.10)	(1041.95 , -86.10)
11	5	(0.00 , 290.44)	(-190.35 , 239.94)	(-190.35 , -239.94)
11	6	(0.00 , -164.48)	(2.06 , -1151.92)	(2.06 , 1151.92)
11	7	(0.00 , -89.01)	(70.81 , -233.85)	(70.81 , 233.85)
11	8	(0.00 , 86.05)	(-21.03 , 443.00)	(-21.03 , -443.00)
11	9	(0.00 , -44.54)	(33.11 , -53.92)	(33.11 , 53.92)
11	10	(0.00 , 118.43)	(-178.20 , 83.73)	(-178.20 , -83.73)
11	11	(0.00 , -35.30)	(-33.79 , 143.76)	(-33.79 , -143.76)
11	12	(0.00 , -12.00)	(-2.54 , 46.20)	(-2.54 , -46.20)
11	13	(0.00 , -57.87)	(45.57 , -257.17)	(45.57 , 257.17)
11	14	(0.00 , -58.77)	(43.37 , 176.27)	(43.37 , -176.27)
11	15	(0.00 , -30.90)	(-133.35 , -156.64)	(-133.35 , 156.64)
11	16	(0.00 , 42.70)	(-23.44 , 136.25)	(-23.44 , -136.25)
11	17	(0.00 , -43.81)	(-11.04 , -31.98)	(-11.04 , 31.98)
11	18	(0.00 , -51.92)	(102.33 , 64.60)	(102.33 , -64.60)

11	19	(0.00 , -31.10)	(53.71 , 377.24)	(53.71 , -377.24)
11	20	(0.00 , 32.19)	(-18.73 , -124.77)	(-18.73 , 124.77)
12	0	(0.00 , -188.78)	(-44.28 , -58.53)	(-44.28 , 58.53)
12	1	(0.00 , -62.47)	(45.22 , 29.81)	(45.22 , -29.81)
12	2	(0.00 , -90.90)	(35.52 , -2.12)	(35.52 , 2.12)
12	3	(0.00 , 157.64)	(-28.70 , -48.09)	(-28.70 , 48.09)
12	4	(0.00 , 421.61)	(-170.17 , -35.56)	(-170.17 , 35.56)
12	5	(0.00 , 47.51)	(-86.17 , -260.40)	(-86.17 , 260.40)
12	6	(0.00 , 79.34)	(-73.44 , 95.94)	(-73.44 , -95.94)
12	7	(0.00 , -38.88)	(47.69 , 99.12)	(47.69 , -99.12)
12	8	(0.00 , 7.61)	(-30.14 , -157.61)	(-30.14 , 157.61)
12	9	(0.00 , 16.69)	(-7.48 , 6.83)	(-7.48 , -6.83)
12	10	(0.00 , -401.47)	(-64.32 , 68.73)	(-64.32 , -68.73)
12	11	(0.00 , -209.91)	(24.48 , 52.61)	(24.48 , -52.61)
12	12	(0.00 , 143.95)	(-225.87 , -470.13)	(-225.87 , 470.13)
12	13	(0.00 , 236.17)	(-64.35 , -273.80)	(-64.35 , 273.80)
12	14	(0.00 , -410.51)	(-144.05 , -5.70)	(-144.05 , 5.70)
12	15	(0.00 , 221.19)	(-364.83 , -251.35)	(-364.83 , 251.35)
12	16	(0.00 , -98.72)	(-13.39 , -16.63)	(-13.39 , 16.63)
12	17	(0.00 , -439.12)	(270.75 , 283.19)	(270.75 , -283.19)
12	18	(0.00 , -117.17)	(34.11 , 61.13)	(34.11 , -61.13)
12	19	(0.00 , -49.32)	(-81.37 , -122.46)	(-81.37 , 122.46)
12	20	(0.00 , 74.23)	(35.42 , 1.16)	(35.42 , -1.16)
13	0	(0.00 , 225.33)	(174.20 , -206.39)	(174.20 , 206.39)
13	1	(0.00 , 38.49)	(81.85 , -62.13)	(81.85 , 62.13)
13	2	(0.00 , -99.97)	(53.92 , -126.95)	(53.92 , 126.95)
13	3	(0.00 , 35.21)	(19.48 , -78.49)	(19.48 , 78.49)
13	4	(0.00 , 128.29)	(3.42 , -21.80)	(3.42 , 21.80)
13	5	(0.00 , -325.65)	(228.74 , -196.94)	(228.74 , 196.94)
13	6	(0.00 , -176.34)	(117.43 , 26.56)	(117.43 , -26.56)
13	7	(0.00 , 3.45)	(-29.99 , 9.12)	(-29.99 , -9.12)
13	8	(0.00 , -160.15)	(112.01 , -138.28)	(112.01 , 138.28)
13	9	(0.00 , 9.76)	(11.85 , -7.91)	(11.85 , 7.91)
13	10	(0.00 , -229.25)	(-165.17 , 63.97)	(-165.17 , -63.97)
13	11	(0.00 , 107.01)	(-29.27 , -30.96)	(-29.27 , 30.96)
13	12	(0.00 , -565.44)	(607.79 , -604.81)	(607.79 , 604.81)
13	13	(0.00 , -850.71)	(155.93 , -130.38)	(155.93 , 130.38)
13	14	(0.00 , 7.57)	(123.76 , -75.78)	(123.76 , 75.78)
13	15	(0.00 , -211.00)	(-67.03 , 218.21)	(-67.03 , -218.21)
13	16	(0.00 , 10.27)	(12.06 , -23.55)	(12.06 , 23.55)
13	17	(0.00 , -264.05)	(-23.75 , -321.53)	(-23.75 , 321.53)
13	18	(0.00 , 10.28)	(37.91 , 0.63)	(37.91 , -0.63)
13	19	(0.00 , 218.09)	(63.67 , -22.76)	(63.67 , 22.76)
13	20	(0.00 , -19.09)	(-25.51 , 21.65)	(-25.51 , -21.65)

14	0	(0.00 , 40.82)	(-12.39 , -148.10)	(-12.39 , 148.10)
14	1	(0.00 , 145.98)	(-109.76 , -16.89)	(-109.76 , 16.89)
14	2	(0.00 , -4.00)	(-5.79 , 6.99)	(-5.79 , -6.99)
14	3	(0.00 , 80.48)	(-31.42 , -65.51)	(-31.42 , 65.51)
14	4	(0.00 , 145.55)	(-43.54 , 26.01)	(-43.54 , -26.01)
14	5	(0.00 , 187.12)	(-178.71 , -83.20)	(-178.71 , 83.20)
14	6	(0.00 , 204.44)	(13.91 , -10.13)	(13.91 , 10.13)
14	7	(0.00 , -3.39)	(72.36 , 60.25)	(72.36 , -60.25)
14	8	(0.00 , -24.23)	(-44.02 , 25.72)	(-44.02 , -25.72)
14	9	(0.00 , -22.92)	(-1.15 , 17.05)	(-1.15 , -17.05)
14	10	(0.00 , 306.23)	(117.90 , -84.64)	(117.90 , 84.64)
14	11	(0.00 , -421.62)	(-224.33 , 71.79)	(-224.33 , -71.79)
14	12	(0.00 , -594.64)	(736.99 , 335.02)	(736.99 , -335.02)
14	13	(0.00 , -682.14)	(196.95 , 214.43)	(196.95 , -214.43)
14	14	(0.00 , -118.16)	(45.10 , 61.71)	(45.10 , -61.71)
14	15	(0.00 , -108.96)	(-206.49 , -262.64)	(-206.49 , 262.64)
14	16	(0.00 , -10.90)	(25.05 , 21.91)	(25.05 , -21.91)
14	17	(0.00 , -502.25)	(258.42 , 433.96)	(258.42 , -433.96)
14	18	(0.00 , -72.09)	(-50.64 , 47.07)	(-50.64 , -47.07)
14	19	(0.00 , -20.34)	(-189.04 , -45.42)	(-189.04 , 45.42)
14	20	(0.00 , -84.26)	(18.30 , -20.33)	(18.30 , 20.33)
15	0	(0.00 , 62.66)	(-12.37 , -54.74)	(-12.37 , 54.74)
15	1	(0.00 , 96.61)	(-74.51 , -12.54)	(-74.51 , 12.54)
15	2	(0.00 , -12.55)	(11.68 , 5.94)	(11.68 , -5.94)
15	3	(0.00 , 25.34)	(2.73 , -60.44)	(2.73 , 60.44)
15	4	(0.00 , 97.97)	(6.61 , 17.61)	(6.61 , -17.61)
15	5	(0.00 , 54.31)	(-67.55 , -97.55)	(-67.55 , 97.55)
15	6	(0.00 , 86.22)	(10.56 , -42.60)	(10.56 , 42.60)
15	7	(0.00 , -11.07)	(36.95 , 24.75)	(36.95 , -24.75)
15	8	(0.00 , -37.96)	(-12.41 , 1.78)	(-12.41 , -1.78)
15	9	(0.00 , -7.97)	(0.87 , 10.65)	(0.87 , -10.65)
15	10	(0.00 , 134.29)	(64.01 , -48.78)	(64.01 , 48.78)
15	11	(0.00 , -129.60)	(-71.49 , 16.32)	(-71.49 , -16.32)
15	12	(0.00 , -270.46)	(359.24 , 136.36)	(359.24 , -136.36)
15	13	(0.00 , -333.74)	(91.96 , 116.01)	(91.96 , -116.01)
15	14	(0.00 , -87.14)	(22.69 , 41.27)	(22.69 , -41.27)
15	15	(0.00 , -19.48)	(-164.75 , -40.35)	(-164.75 , 40.35)
15	16	(0.00 , -49.43)	(16.71 , -33.06)	(16.71 , 33.06)
15	17	(0.00 , -362.22)	(161.40 , 92.27)	(161.40 , -92.27)
15	18	(0.00 , -72.04)	(-16.89 , 13.54)	(-16.89 , -13.54)
15	19	(0.00 , 48.12)	(-87.87 , 4.59)	(-87.87 , -4.59)
15	20	(0.00 , -25.28)	(-4.92 , 24.18)	(-4.92 , -24.18)
16	0	(0.00 , 204.87)	(-75.18 , 147.82)	(-75.18 , -147.82)
16	1	(0.00 , -40.41)	(-27.37 , 28.66)	(-27.37 , -28.66)

16	2	(0.00 , 80.93)	(-101.50 , 49.83)	(-101.50 , -49.83)
16	3	(0.00 , 160.54)	(50.06 , 58.06)	(50.06 , -58.06)
16	4	(0.00 , 87.42)	(105.98 , -45.48)	(105.98 , 45.48)
16	5	(0.00 , -248.59)	(130.75 , -232.66)	(130.75 , 232.66)
16	6	(0.00 , -52.19)	(-18.56 , -121.89)	(-18.56 , 121.89)
16	7	(0.00 , 4.54)	(-46.20 , -30.91)	(-46.20 , 30.91)
16	8	(0.00 , -53.65)	(64.24 , -8.30)	(64.24 , 8.30)
16	9	(0.00 , -11.47)	(-15.66 , -4.95)	(-15.66 , 4.95)
16	10	(0.00 , 103.17)	(283.43 , -102.73)	(283.43 , 102.73)
16	11	(0.00 , 220.22)	(317.58 , -57.29)	(317.58 , 57.29)
16	12	(0.00 , 318.05)	(-128.84 , 321.57)	(-128.84 , -321.57)
16	13	(0.00 , 374.16)	(-85.50 , 270.73)	(-85.50 , -270.73)
16	14	(0.00 , -471.46)	(-130.60 , -44.45)	(-130.60 , 44.45)
16	15	(0.00 , 460.85)	(-621.92 , 438.57)	(-621.92 , -438.57)
16	16	(0.00 , -98.68)	(-19.14 , -9.31)	(-19.14 , 9.31)
16	17	(0.00 , -1134.35)	(564.66 , -419.16)	(564.66 , 419.16)
16	18	(0.00 , -268.69)	(-38.96 , -73.33)	(-38.96 , 73.33)
16	19	(0.00 , 221.86)	(-5.06 , 105.73)	(-5.06 , -105.73)
16	20	(0.00 , 83.33)	(-54.42 , 1.05)	(-54.42 , -1.05)
17	0	(0.00 , 12.82)	(-0.56 , -8.03)	(-0.56 , 8.03)
17	1	(0.00 , -21.66)	(29.67 , -3.28)	(29.67 , 3.28)
17	2	(0.00 , 28.17)	(-35.80 , -12.23)	(-35.80 , 12.23)
17	3	(0.00 , 54.65)	(-12.92 , 0.36)	(-12.92 , -0.36)
17	4	(0.00 , 6.20)	(-6.20 , -5.53)	(-6.20 , 5.53)
17	5	(0.00 , -28.67)	(16.71 , -23.19)	(16.71 , 23.19)
17	6	(0.00 , -16.99)	(2.02 , -8.34)	(2.02 , 8.34)
17	7	(0.00 , 7.89)	(-17.33 , -3.10)	(-17.33 , 3.10)
17	8	(0.00 , 0.70)	(5.26 , -1.42)	(5.26 , 1.42)
17	9	(0.00 , 15.55)	(-6.75 , 32.66)	(-6.75 , -32.66)
17	10	(0.00 , 27.77)	(25.67 , -7.32)	(25.67 , 7.32)
17	11	(0.00 , -27.25)	(16.42 , -0.63)	(16.42 , 0.63)
17	12	(0.00 , -15.22)	(32.23 , 40.97)	(32.23 , -40.97)
17	13	(0.00 , -9.15)	(-4.00 , 26.91)	(-4.00 , -26.91)
17	14	(0.00 , -21.90)	(-8.68 , -0.93)	(-8.68 , 0.93)
17	15	(0.00 , 12.50)	(-21.24 , 0.81)	(-21.24 , -0.81)
17	16	(0.00 , 1.12)	(-2.47 , -1.48)	(-2.47 , 1.48)
17	17	(0.00 , -69.71)	(45.28 , 4.44)	(45.28 , -4.44)
17	18	(0.00 , 6.06)	(-20.00 , 5.22)	(-20.00 , -5.22)
17	19	(0.00 , -0.13)	(5.84 , 0.03)	(5.84 , -0.03)
17	20	(0.00 , -3.37)	(-10.80 , 0.16)	(-10.80 , -0.16)
18	0	(0.00 , 29.73)	(-47.08 , 62.21)	(-47.08 , -62.21)
18	1	(0.00 , 116.04)	(-217.26 , 30.85)	(-217.26 , -30.85)
18	2	(0.00 , 3.84)	(36.64 , 142.04)	(36.64 , -142.04)
18	3	(0.00 , -42.56)	(8.24 , 17.04)	(8.24 , -17.04)

18	4	(0.00 , 16.74)	(-9.92 , 19.28)	(-9.92 , -19.28)
18	5	(0.00 , 39.34)	(-21.50 , 37.90)	(-21.50 , -37.90)
18	6	(0.00 , 35.28)	(0.77 , 16.91)	(0.77 , -16.91)
18	7	(0.00 , -2.82)	(13.20 , 11.86)	(13.20 , -11.86)
18	8	(0.00 , -2.09)	(-28.89 , 36.36)	(-28.89 , -36.36)
18	9	(0.00 , -16.94)	(9.60 , -11.14)	(9.60 , 11.14)
18	10	(0.00 , 131.05)	(-12.91 , -5.23)	(-12.91 , 5.23)
18	11	(0.00 , 2.40)	(56.20 , -30.57)	(56.20 , 30.57)
18	12	(0.00 , 65.74)	(-37.30 , 165.03)	(-37.30 , -165.03)
18	13	(0.00 , 105.09)	(-39.87 , 2.63)	(-39.87 , -2.63)
18	14	(0.00 , -20.01)	(-22.82 , -11.32)	(-22.82 , 11.32)
18	15	(0.00 , 53.51)	(-46.58 , 5.04)	(-46.58 , -5.04)
18	16	(0.00 , -8.48)	(-1.53 , -1.93)	(-1.53 , 1.93)
18	17	(0.00 , -67.95)	(36.28 , -64.16)	(36.28 , 64.16)
18	18	(0.00 , -54.86)	(-2.62 , -45.09)	(-2.62 , 45.09)
18	19	(0.00 , 15.22)	(-41.83 , 33.26)	(-41.83 , -33.26)
18	20	(0.00 , -18.96)	(3.67 , -4.82)	(3.67 , 4.82)
19	0	(0.00 , -94.63)	(178.82 , -120.51)	(178.82 , 120.51)
19	1	(0.00 , -455.73)	(822.58 , -103.27)	(822.58 , 103.27)
19	2	(0.00 , 91.19)	(-215.33 , -519.38)	(-215.33 , 519.38)
19	3	(0.00 , 175.87)	(-62.52 , 56.59)	(-62.52 , -56.59)
19	4	(0.00 , -243.25)	(22.61 , -62.85)	(22.61 , 62.85)
19	5	(0.00 , -133.33)	(54.57 , 153.36)	(54.57 , -153.36)
19	6	(0.00 , -91.51)	(26.25 , -73.59)	(26.25 , 73.59)
19	7	(0.00 , 25.08)	(-69.37 , -122.20)	(-69.37 , 122.20)
19	8	(0.00 , 62.07)	(106.17 , 28.57)	(106.17 , -28.57)
19	9	(0.00 , -5.44)	(-37.77 , -52.74)	(-37.77 , 52.74)
19	10	(0.00 , -209.28)	(361.08 , -44.45)	(361.08 , 44.45)
19	11	(0.00 , -50.78)	(-38.89 , 132.92)	(-38.89 , -132.92)
19	12	(0.00 , -214.21)	(240.52 , 17.49)	(240.52 , -17.49)
19	13	(0.00 , -349.33)	(179.09 , 409.74)	(179.09 , -409.74)
19	14	(0.00 , -45.48)	(99.37 , -120.36)	(99.37 , 120.36)
19	15	(0.00 , -78.50)	(40.19 , 160.20)	(40.19 , -160.20)
19	16	(0.00 , 6.90)	(17.92 , -21.42)	(17.92 , 21.42)
19	17	(0.00 , -99.73)	(57.05 , 56.18)	(57.05 , -56.18)
19	18	(0.00 , 141.51)	(-57.10 , 81.17)	(-57.10 , -81.17)
19	19	(0.00 , -48.66)	(174.94 , -50.29)	(174.94 , 50.29)
19	20	(0.00 , 22.03)	(-18.17 , 58.75)	(-18.17 , -58.75)
20	0	(0.00 , 35.77)	(-76.59 , -270.60)	(-76.59 , 270.60)
20	1	(0.00 , 266.85)	(-353.09 , -0.97)	(-353.09 , 0.97)
20	2	(0.00 , -139.11)	(190.46 , 114.09)	(190.46 , -114.09)
20	3	(0.00 , -2.44)	(-62.28 , -135.69)	(-62.28 , 135.69)
20	4	(0.00 , -1.34)	(64.58 , 88.36)	(64.58 , -88.36)
20	5	(0.00 , -35.25)	(62.66 , 9.20)	(62.66 , -9.20)

20	6	(0.00 , -153.30)	(22.87 , -295.45)	(22.87 , 295.45)
20	7	(0.00 , -88.31)	(62.96 , -27.98)	(62.96 , 27.98)
20	8	(0.00 , -132.91)	(55.84 , 59.89)	(55.84 , -59.89)
20	9	(0.00 , 41.29)	(-17.50 , 11.41)	(-17.50 , -11.41)
20	10	(0.00 , -1391.41)	(931.20 , -112.00)	(931.20 , 112.00)
20	11	(0.00 , 134.00)	(-14.63 , 418.36)	(-14.63 , -418.36)
20	12	(0.00 , -58.50)	(-41.60 , -570.52)	(-41.60 , 570.52)
20	13	(0.00 , -69.75)	(160.60 , 823.70)	(160.60 , -823.70)
20	14	(0.00 , -200.95)	(236.42 , -338.57)	(236.42 , 338.57)
20	15	(0.00 , -145.78)	(182.97 , 318.26)	(182.97 , -318.26)
20	16	(0.00 , -62.85)	(59.06 , -69.41)	(59.06 , 69.41)
20	17	(0.00 , 156.82)	(-116.60 , 153.11)	(-116.60 , -153.11)
20	18	(0.00 , 167.40)	(-73.31 , -28.22)	(-73.31 , 28.22)
20	19	(0.00 , 147.74)	(-109.75 , -27.07)	(-109.75 , 27.07)
20	20	(0.00 , 83.04)	(-63.64 , 106.32)	(-63.64 , -106.32)

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T	S	MS= 0	-1	+1
1	0	(0.00 , -33.49)	(-22.62 , -39.54)	(-22.62 , 39.54)
1	1	(0.00 , 70.09)	(-78.96 , 9.26)	(-78.96 , -9.26)
1	2	(0.00 , 510.10)	(-899.90 , 101.56)	(-899.90 , -101.56)
1	3	(0.00 , -1030.07)	(345.82 , 8.68)	(345.82 , -8.68)
1	4	(0.00 , -461.64)	(5.78 , -16.11)	(5.78 , 16.11)
1	5	(0.00 , 44.91)	(32.15 , 49.10)	(32.15 , -49.10)
1	6	(0.00 , -25.21)	(61.38 , 7.35)	(61.38 , -7.35)
1	7	(0.00 , -4.54)	(32.18 , -71.74)	(32.18 , 71.74)
1	8	(0.00 , 84.13)	(-21.63 , -21.11)	(-21.63 , 21.11)
1	9	(0.00 , 34.95)	(-103.11 , -24.09)	(-103.11 , 24.09)
1	10	(0.00 , 75.83)	(-221.53 , 62.18)	(-221.53 , -62.18)
1	11	(0.00 , -27.95)	(75.88 , 110.91)	(75.88 , -110.91)
1	12	(0.00 , -5.75)	(95.22 , 3.20)	(95.22 , -3.20)
1	13	(0.00 , 252.30)	(-672.31 , -1.82)	(-672.31 , 1.82)
1	14	(0.00 , 126.34)	(-399.40 , -4.09)	(-399.40 , 4.09)
1	15	(0.00 , -19.57)	(31.34 , 1.59)	(31.34 , -1.59)
1	16	(0.00 , 358.46)	(-347.50 , -10.97)	(-347.50 , 10.97)
1	17	(0.00 , 85.46)	(-24.60 , -17.15)	(-24.60 , 17.15)
1	18	(0.00 , 29.59)	(21.83 , -15.00)	(21.83 , 15.00)
1	19	(0.00 , 10.54)	(-15.01 , 0.81)	(-15.01 , -0.81)
1	20	(0.00 , 7.63)	(-8.05 , 8.45)	(-8.05 , -8.45)
2	0	(0.00 , -217.10)	(-23.30 , -11.30)	(-23.30 , 11.30)
2	1	(0.00 , -453.33)	(-67.19 , 104.07)	(-67.19 , -104.07)
2	2	(0.00 , 42.64)	(11.61 , 562.02)	(11.61 , -562.02)

2	3	(0.00 , -57.89)	(11.92 , -332.63)	(11.92 , 332.63)
2	4	(0.00 , 77.16)	(-105.39 , -18.93)	(-105.39 , 18.93)
2	5	(0.00 , 454.72)	(-497.32 , 10.19)	(-497.32 , -10.19)
2	6	(0.00 , -488.03)	(-56.18 , 58.93)	(-56.18 , -58.93)
2	7	(0.00 , -25.16)	(54.53 , 7.80)	(54.53 , -7.80)
2	8	(0.00 , -36.63)	(5.38 , -15.52)	(5.38 , 15.52)
2	9	(0.00 , -16.32)	(9.41 , -13.24)	(9.41 , 13.24)
2	10	(0.00 , 6.58)	(-43.35 , -83.73)	(-43.35 , 83.73)
2	11	(0.00 , 116.23)	(-60.63 , 28.15)	(-60.63 , -28.15)
2	12	(0.00 , 5.41)	(8.72 , 46.42)	(8.72 , -46.42)
2	13	(0.00 , -79.96)	(-8.85 , -183.41)	(-8.85 , 183.41)
2	14	(0.00 , -58.94)	(8.80 , -41.05)	(8.80 , 41.05)
2	15	(0.00 , -34.86)	(10.47 , 8.77)	(10.47 , -8.77)
2	16	(0.00 , -19.64)	(-13.30 , -84.58)	(-13.30 , 84.58)
2	17	(0.00 , 0.91)	(18.45 , -13.16)	(18.45 , 13.16)
2	18	(0.00 , 156.82)	(-3.84 , -39.48)	(-3.84 , 39.48)
2	19	(0.00 , 13.16)	(-0.57 , 0.17)	(-0.57 , -0.17)
2	20	(0.00 , 200.74)	(-469.30 , 4.44)	(-469.30 , -4.44)
3	0	(0.00 , -42.61)	(-131.21 , 122.54)	(-131.21 , -122.54)
3	1	(0.00 , 31.87)	(863.37 , -156.14)	(863.37 , 156.14)
3	2	(0.00 , -36.12)	(-62.87 , -560.83)	(-62.87 , 560.83)
3	3	(0.00 , 45.91)	(129.63 , 1040.10)	(129.63 , -1040.10)
3	4	(0.00 , 73.76)	(-138.28 , 384.62)	(-138.28 , -384.62)
3	5	(0.00 , 433.67)	(-422.35 , 49.41)	(-422.35 , -49.41)
3	6	(0.00 , -451.12)	(17.71 , -118.89)	(17.71 , 118.89)
3	7	(0.00 , 9.46)	(16.97 , 63.17)	(16.97 , -63.17)
3	8	(0.00 , -0.92)	(29.75 , -12.44)	(29.75 , 12.44)
3	9	(0.00 , 3.89)	(-9.84 , 75.20)	(-9.84 , -75.20)
3	10	(0.00 , 67.97)	(149.61 , 244.81)	(149.61 , -244.81)
3	11	(0.00 , -110.51)	(8.17 , -75.15)	(8.17 , 75.15)
3	12	(0.00 , 46.69)	(-37.65 , -72.45)	(-37.65 , 72.45)
3	13	(0.00 , 45.53)	(116.80 , 431.51)	(116.80 , -431.51)
3	14	(0.00 , 21.13)	(34.53 , 470.18)	(34.53 , -470.18)
3	15	(0.00 , -36.19)	(-0.33 , -31.92)	(-0.33 , 31.92)
3	16	(0.00 , -12.93)	(32.87 , 113.22)	(32.87 , -113.22)
3	17	(0.00 , -0.64)	(4.03 , -2.32)	(4.03 , 2.32)
3	18	(0.00 , 79.62)	(-208.46 , -18.61)	(-208.46 , 18.61)
3	19	(0.00 , -7.33)	(0.82 , -6.42)	(0.82 , 6.42)
3	20	(0.00 , 190.64)	(-419.24 , -83.62)	(-419.24 , 83.62)
4	0	(0.00 , -15.06)	(-18.99 , 28.64)	(-18.99 , -28.64)
4	1	(0.00 , 3.63)	(179.57 , -32.38)	(179.57 , 32.38)
4	2	(0.00 , -26.92)	(4.09 , -113.77)	(4.09 , 113.77)
4	3	(0.00 , 22.95)	(7.56 , 214.98)	(7.56 , -214.98)
4	4	(0.00 , 48.80)	(-10.54 , 64.05)	(-10.54 , -64.05)

4	5	(0.00 , 79.06)	(-90.57 , -47.68)	(-90.57 , 47.68)
4	6	(0.00 , -85.41)	(2.01 , -6.80)	(2.01 , 6.80)
4	7	(0.00 , 38.88)	(31.11 , -4.67)	(31.11 , 4.67)
4	8	(0.00 , 4.84)	(10.30 , 6.13)	(10.30 , -6.13)
4	9	(0.00 , 2.35)	(2.20 , 6.71)	(2.20 , -6.71)
4	10	(0.00 , 19.98)	(34.08 , 87.07)	(34.08 , -87.07)
4	11	(0.00 , -5.61)	(-1.26 , 41.95)	(-1.26 , -41.95)
4	12	(0.00 , -3.00)	(-13.65 , -25.33)	(-13.65 , 25.33)
4	13	(0.00 , -1.15)	(36.87 , 77.37)	(36.87 , -77.37)
4	14	(0.00 , -2.42)	(20.23 , 93.99)	(20.23 , -93.99)
4	15	(0.00 , -12.93)	(0.60 , -7.50)	(0.60 , 7.50)
4	16	(0.00 , -1.81)	(22.15 , 25.63)	(22.15 , -25.63)
4	17	(0.00 , -19.03)	(-13.19 , 10.93)	(-13.19 , -10.93)
4	18	(0.00 , 19.60)	(-42.14 , 1.14)	(-42.14 , -1.14)
4	19	(0.00 , -1.98)	(0.16 , -1.48)	(0.16 , 1.48)
4	20	(0.00 , 47.01)	(-78.67 , 9.87)	(-78.67 , -9.87)
5	0	(0.00 , 99.38)	(-4.18 , 2.99)	(-4.18 , -2.99)
5	1	(0.00 , -1536.70)	(877.47 , -1.01)	(877.47 , 1.01)
5	2	(0.00 , 200.27)	(-59.66 , 1150.83)	(-59.66 , -1150.83)
5	3	(0.00 , -75.99)	(90.95 , 499.94)	(90.95 , -499.94)
5	4	(0.00 , -160.82)	(47.67 , 530.27)	(47.67 , -530.27)
5	5	(0.00 , -234.33)	(268.62 , 32.70)	(268.62 , -32.70)
5	6	(0.00 , 164.70)	(38.61 , 15.41)	(38.61 , -15.41)
5	7	(0.00 , -34.87)	(-8.13 , 105.06)	(-8.13 , -105.06)
5	8	(0.00 , -48.05)	(24.48 , -76.92)	(24.48 , 76.92)
5	9	(0.00 , -20.96)	(10.72 , 49.16)	(10.72 , -49.16)
5	10	(0.00 , -178.42)	(40.49 , 86.62)	(40.49 , -86.62)
5	11	(0.00 , 101.91)	(-65.86 , 39.14)	(-65.86 , -39.14)
5	12	(0.00 , -21.70)	(-12.03 , -187.80)	(-12.03 , 187.80)
5	13	(0.00 , -186.49)	(103.55 , 285.67)	(103.55 , -285.67)
5	14	(0.00 , 25.10)	(-16.71 , 136.19)	(-16.71 , -136.19)
5	15	(0.00 , 37.47)	(-12.33 , 10.26)	(-12.33 , -10.26)
5	16	(0.00 , -76.42)	(3.70 , -158.52)	(3.70 , 158.52)
5	17	(0.00 , 16.54)	(-19.77 , -39.09)	(-19.77 , 39.09)
5	18	(0.00 , 259.01)	(-149.42 , -60.39)	(-149.42 , 60.39)
5	19	(0.00 , 1.95)	(-0.40 , 11.89)	(-0.40 , -11.89)
5	20	(0.00 , -116.10)	(244.22 , -60.83)	(244.22 , 60.83)
6	0	(0.00 , 68.44)	(66.18 , -3.10)	(66.18 , 3.10)
6	1	(0.00 , -353.01)	(320.44 , -22.03)	(320.44 , 22.03)
6	2	(0.00 , -171.86)	(88.22 , 146.73)	(88.22 , -146.73)
6	3	(0.00 , -67.72)	(-148.76 , 251.21)	(-148.76 , -251.21)
6	4	(0.00 , 570.94)	(311.44 , -141.13)	(311.44 , 141.13)
6	5	(0.00 , -530.32)	(260.14 , -1041.73)	(260.14 , 1041.73)
6	6	(0.00 , 296.05)	(6.89 , 150.42)	(6.89 , -150.42)

6	7	(0.00 , 27.26)	(17.58 , 23.66)	(17.58 , -23.66)
6	8	(0.00 , -27.62)	(12.33 , -9.66)	(12.33 , 9.66)
6	9	(0.00 , -23.18)	(51.57 , 6.49)	(51.57 , -6.49)
6	10	(0.00 , -75.56)	(44.58 , -0.76)	(44.58 , 0.76)
6	11	(0.00 , 73.07)	(-17.15 , -1.57)	(-17.15 , 1.57)
6	12	(0.00 , -4.42)	(93.89 , -107.65)	(93.89 , 107.65)
6	13	(0.00 , 51.14)	(92.36 , 117.45)	(92.36 , -117.45)
6	14	(0.00 , -178.53)	(189.08 , 15.71)	(189.08 , -15.71)
6	15	(0.00 , 21.90)	(-32.58 , -17.48)	(-32.58 , 17.48)
6	16	(0.00 , -52.70)	(95.11 , -33.39)	(95.11 , 33.39)
6	17	(0.00 , -29.38)	(-12.26 , -3.00)	(-12.26 , 3.00)
6	18	(0.00 , 73.26)	(-67.60 , 20.63)	(-67.60 , -20.63)
6	19	(0.00 , 0.02)	(1.68 , 2.90)	(1.68 , -2.90)
6	20	(0.00 , 37.13)	(398.29 , 295.20)	(398.29 , -295.20)
7	0	(0.00 , -236.61)	(-49.37 , 106.64)	(-49.37 , -106.64)
7	1	(0.00 , 163.14)	(-11.94 , 2.08)	(-11.94 , -2.08)
7	2	(0.00 , 236.37)	(-617.10 , -41.29)	(-617.10 , 41.29)
7	3	(0.00 , -778.49)	(134.30 , 101.48)	(134.30 , -101.48)
7	4	(0.00 , 185.22)	(150.95 , -206.05)	(150.95 , 206.05)
7	5	(0.00 , 350.20)	(-539.49 , -749.23)	(-539.49 , 749.23)
7	6	(0.00 , -463.51)	(6.94 , 284.12)	(6.94 , -284.12)
7	7	(0.00 , -28.84)	(67.58 , -27.83)	(67.58 , 27.83)
7	8	(0.00 , 21.63)	(-14.82 , 1.66)	(-14.82 , -1.66)
7	9	(0.00 , -64.60)	(-60.81 , -20.37)	(-60.81 , 20.37)
7	10	(0.00 , 86.28)	(-98.72 , -39.11)	(-98.72 , 39.11)
7	11	(0.00 , -55.84)	(97.07 , -14.06)	(97.07 , 14.06)
7	12	(0.00 , 50.05)	(166.86 , 64.80)	(166.86 , -64.80)
7	13	(0.00 , 291.81)	(-499.20 , -55.72)	(-499.20 , 55.72)
7	14	(0.00 , -129.29)	(-114.89 , 159.15)	(-114.89 , -159.15)
7	15	(0.00 , -53.32)	(11.10 , -11.79)	(11.10 , 11.79)
7	16	(0.00 , 239.22)	(-195.94 , 18.83)	(-195.94 , -18.83)
7	17	(0.00 , 15.84)	(-9.03 , -10.75)	(-9.03 , 10.75)
7	18	(0.00 , 96.92)	(-43.23 , -62.79)	(-43.23 , 62.79)
7	19	(0.00 , 9.93)	(-13.20 , -1.32)	(-13.20 , 1.32)
7	20	(0.00 , 314.96)	(-385.89 , 319.72)	(-385.89 , -319.72)
8	0	(0.00 , -187.04)	(-82.98 , 123.48)	(-82.98 , -123.48)
8	1	(0.00 , -85.05)	(-18.94 , 42.47)	(-18.94 , -42.47)
8	2	(0.00 , -277.15)	(510.97 , 81.34)	(510.97 , -81.34)
8	3	(0.00 , 622.82)	(-208.77 , -83.96)	(-208.77 , 83.96)
8	4	(0.00 , 242.67)	(-93.54 , 33.98)	(-93.54 , -33.98)
8	5	(0.00 , 568.05)	(-608.87 , 138.05)	(-608.87 , -138.05)
8	6	(0.00 , -515.97)	(-71.57 , 46.59)	(-71.57 , -46.59)
8	7	(0.00 , 94.57)	(35.61 , 9.40)	(35.61 , -9.40)
8	8	(0.00 , -43.90)	(18.15 , 0.74)	(18.15 , -0.74)

8	9	(0.00 , -55.00)	(5.56 , 9.61)	(5.56 , -9.61)
8	10	(0.00 , -1.21)	(186.94 , 19.30)	(186.94 , -19.30)
8	11	(0.00 , -72.88)	(-4.32 , 44.41)	(-4.32 , -44.41)
8	12	(0.00 , 13.68)	(-164.02 , 91.04)	(-164.02 , -91.04)
8	13	(0.00 , -258.43)	(432.24 , -120.66)	(432.24 , 120.66)
8	14	(0.00 , 54.33)	(145.22 , 122.95)	(145.22 , -122.95)
8	15	(0.00 , -40.68)	(-2.35 , -0.64)	(-2.35 , 0.64)
8	16	(0.00 , -236.89)	(189.67 , -4.05)	(189.67 , 4.05)
8	17	(0.00 , -35.37)	(43.38 , -3.85)	(43.38 , 3.85)
8	18	(0.00 , 17.05)	(-8.62 , -37.77)	(-8.62 , 37.77)
8	19	(0.00 , -15.67)	(9.81 , -3.65)	(9.81 , 3.65)
8	20	(0.00 , 184.90)	(-525.68 , -0.71)	(-525.68 , 0.71)
9	0	(0.00 , -69.22)	(10.73 , -774.80)	(10.73 , 774.80)
9	1	(0.00 , 14.45)	(-55.77 , 55.63)	(-55.77 , -55.63)
9	2	(0.00 , -202.14)	(158.17 , -54.91)	(158.17 , 54.91)
9	3	(0.00 , -604.18)	(510.63 , 4.78)	(510.63 , -4.78)
9	4	(0.00 , 1157.28)	(-1086.92 , -46.63)	(-1086.92 , 46.63)
9	5	(0.00 , -310.06)	(262.09 , -189.43)	(262.09 , 189.43)
9	6	(0.00 , -124.68)	(-2.44 , -1231.42)	(-2.44 , 1231.42)
9	7	(0.00 , 48.15)	(-177.83 , 144.19)	(-177.83 , -144.19)
9	8	(0.00 , -27.41)	(-20.34 , 16.95)	(-20.34 , -16.95)
9	9	(0.00 , -62.83)	(-22.82 , 200.76)	(-22.82 , -200.76)
9	10	(0.00 , -31.98)	(-56.23 , 204.47)	(-56.23 , -204.47)
9	11	(0.00 , 26.19)	(-8.47 , -299.49)	(-8.47 , 299.49)
9	12	(0.00 , 79.49)	(97.55 , 120.52)	(97.55 , -120.52)
9	13	(0.00 , 47.63)	(-157.71 , -120.04)	(-157.71 , 120.04)
9	14	(0.00 , -92.87)	(24.24 , -0.21)	(24.24 , 0.21)
9	15	(0.00 , -36.29)	(36.79 , -77.65)	(36.79 , 77.65)
9	16	(0.00 , 32.76)	(-77.99 , -47.89)	(-77.99 , 47.89)
9	17	(0.00 , -23.02)	(-31.34 , 45.19)	(-31.34 , -45.19)
9	18	(0.00 , 33.80)	(-28.44 , 223.10)	(-28.44 , -223.10)
9	19	(0.00 , 0.78)	(0.41 , -12.57)	(0.41 , 12.57)
9	20	(0.00 , 253.18)	(-274.67 , -570.88)	(-274.67 , 570.88)
10	0	(0.00 , 166.92)	(4.58 , 173.78)	(4.58 , -173.78)
10	1	(0.00 , 58.15)	(-56.43 , -27.75)	(-56.43 , 27.75)
10	2	(0.00 , 140.81)	(-59.83 , -6.61)	(-59.83 , 6.61)
10	3	(0.00 , 216.12)	(-74.94 , -66.30)	(-74.94 , 66.30)
10	4	(0.00 , -532.44)	(289.81 , 59.46)	(289.81 , -59.46)
10	5	(0.00 , 40.46)	(25.68 , 357.75)	(25.68 , -357.75)
10	6	(0.00 , 20.01)	(-40.92 , 261.39)	(-40.92 , -261.39)
10	7	(0.00 , -481.16)	(-40.20 , 77.96)	(-40.20 , -77.96)
10	8	(0.00 , -102.63)	(-21.81 , 24.05)	(-21.81 , -24.05)
10	9	(0.00 , -142.28)	(64.12 , 52.02)	(64.12 , -52.02)

10	10	(0.00 , -104.06)	(-165.94 , -435.80)	(-165.94 , 435.80)
10	11	(0.00 , 280.01)	(-112.77 , -516.49)	(-112.77 , 516.49)
10	12	(0.00 , 80.32)	(308.81 , 120.54)	(308.81 , -120.54)
10	13	(0.00 , 368.35)	(-134.73 , 1.63)	(-134.73 , -1.63)
10	14	(0.00 , -368.02)	(272.70 , 171.38)	(272.70 , -171.38)
10	15	(0.00 , 54.52)	(-23.66 , 19.29)	(-23.66 , -19.29)
10	16	(0.00 , 42.49)	(26.05 , -28.54)	(26.05 , 28.54)
10	17	(0.00 , -113.93)	(-28.91 , -6.62)	(-28.91 , 6.62)
10	18	(0.00 , -14.43)	(-40.90 , -150.06)	(-40.90 , 150.06)
10	19	(0.00 , 41.67)	(0.26 , 6.83)	(0.26 , -6.83)
10	20	(0.00 , -148.33)	(108.78 , 58.66)	(108.78 , -58.66)
11	0	(0.00 , -253.23)	(-165.21 , 165.18)	(-165.21 , -165.18)
11	1	(0.00 , -50.78)	(-59.93 , 67.35)	(-59.93 , -67.35)
11	2	(0.00 , 55.89)	(-35.61 , 88.11)	(-35.61 , -88.11)
11	3	(0.00 , -14.52)	(40.45 , -72.73)	(40.45 , 72.73)
11	4	(0.00 , 22.38)	(-92.47 , 21.46)	(-92.47 , -21.46)
11	5	(0.00 , 325.39)	(-295.85 , 122.70)	(-295.85 , -122.70)
11	6	(0.00 , -120.34)	(89.79 , 5.14)	(89.79 , -5.14)
11	7	(0.00 , -98.48)	(-126.95 , 31.44)	(-126.95 , -31.44)
11	8	(0.00 , 2.60)	(-23.64 , 2.72)	(-23.64 , -2.72)
11	9	(0.00 , 130.56)	(-87.49 , -17.50)	(-87.49 , 17.50)
11	10	(0.00 , -34.46)	(560.69 , -327.65)	(560.69 , 327.65)
11	11	(0.00 , -974.96)	(470.19 , -189.05)	(470.19 , 189.05)
11	12	(0.00 , 303.69)	(22.74 , -230.66)	(22.74 , 230.66)
11	13	(0.00 , 167.80)	(-200.38 , 256.34)	(-200.38 , -256.34)
11	14	(0.00 , -279.78)	(37.73 , -372.50)	(37.73 , 372.50)
11	15	(0.00 , 12.04)	(1.88 , 28.28)	(1.88 , -28.28)
11	16	(0.00 , -51.56)	(10.25 , -38.47)	(10.25 , 38.47)
11	17	(0.00 , -28.82)	(-19.95 , 8.53)	(-19.95 , -8.53)
11	18	(0.00 , 229.79)	(2.30 , 28.82)	(2.30 , -28.82)
11	19	(0.00 , -61.86)	(-14.69 , 25.92)	(-14.69 , -25.92)
11	20	(0.00 , 63.10)	(-256.78 , -19.94)	(-256.78 , 19.94)
12	0	(0.00 , -92.40)	(19.24 , -215.81)	(19.24 , 215.81)
12	1	(0.00 , 189.36)	(-118.80 , -42.79)	(-118.80 , 42.79)
12	2	(0.00 , -64.05)	(73.54 , -17.35)	(73.54 , 17.35)
12	3	(0.00 , 21.38)	(27.52 , 107.77)	(27.52 , -107.77)
12	4	(0.00 , 134.83)	(-84.23 , 30.65)	(-84.23 , -30.65)
12	5	(0.00 , 245.93)	(-244.61 , -29.74)	(-244.61 , 29.74)
12	6	(0.00 , -115.83)	(-45.93 , -20.82)	(-45.93 , 20.82)
12	7	(0.00 , -171.23)	(46.86 , 15.64)	(46.86 , -15.64)
12	8	(0.00 , 0.68)	(27.73 , -6.00)	(27.73 , 6.00)
12	9	(0.00 , 557.95)	(384.74 , -136.75)	(384.74 , 136.75)
12	10	(0.00 , 272.05)	(-588.81 , -14.38)	(-588.81 , 14.38)
12	11	(0.00 , 1030.18)	(-611.12 , -50.10)	(-611.12 , 50.10)

12	12	(0.00 , -269.08)	(74.86 , -276.64)	(74.86 , 276.64)
12	13	(0.00 , -101.27)	(155.59 , 428.15)	(155.59 , -428.15)
12	14	(0.00 , 5.07)	(-23.42 , -591.06)	(-23.42 , 591.06)
12	15	(0.00 , -0.18)	(33.39 , 32.47)	(33.39 , -32.47)
12	16	(0.00 , 21.33)	(-42.27 , -6.17)	(-42.27 , 6.17)
12	17	(0.00 , 9.46)	(16.83 , 5.49)	(16.83 , -5.49)
12	18	(0.00 , 189.50)	(129.16 , 109.53)	(129.16 , -109.53)
12	19	(0.00 , 77.80)	(10.98 , 9.98)	(10.98 , -9.98)
12	20	(0.00 , 167.45)	(-317.34 , 0.09)	(-317.34 , -0.09)
13	0	(0.00 , 188.22)	(-114.04 , 50.70)	(-114.04 , -50.70)
13	1	(0.00 , 66.09)	(-101.15 , 9.76)	(-101.15 , -9.76)
13	2	(0.00 , 17.69)	(-84.44 , 40.35)	(-84.44 , -40.35)
13	3	(0.00 , -164.99)	(-5.65 , 6.26)	(-5.65 , -6.26)
13	4	(0.00 , 185.54)	(50.48 , -28.92)	(50.48 , 28.92)
13	5	(0.00 , -114.79)	(27.95 , -248.66)	(27.95 , 248.66)
13	6	(0.00 , -78.28)	(23.54 , 82.32)	(23.54 , -82.32)
13	7	(0.00 , -281.27)	(-310.00 , 150.81)	(-310.00 , -150.81)
13	8	(0.00 , -43.05)	(-62.80 , 27.75)	(-62.80 , -27.75)
13	9	(0.00 , 81.74)	(-134.99 , 15.35)	(-134.99 , -15.35)
13	10	(0.00 , 66.37)	(-70.97 , -298.26)	(-70.97 , 298.26)
13	11	(0.00 , -277.87)	(-69.34 , -553.49)	(-69.34 , 553.49)
13	12	(0.00 , -112.00)	(-571.55 , 201.94)	(-571.55 , -201.94)
13	13	(0.00 , -648.33)	(375.13 , 29.51)	(375.13 , -29.51)
13	14	(0.00 , 1091.05)	(-718.34 , 68.48)	(-718.34 , -68.48)
13	15	(0.00 , -93.06)	(54.94 , -16.52)	(54.94 , 16.52)
13	16	(0.00 , -129.33)	(-159.87 , -16.80)	(-159.87 , 16.80)
13	17	(0.00 , -2.74)	(-22.45 , -9.06)	(-22.45 , 9.06)
13	18	(0.00 , -227.47)	(162.59 , -59.12)	(162.59 , 59.12)
13	19	(0.00 , -21.85)	(22.60 , -16.94)	(22.60 , 16.94)
13	20	(0.00 , 26.18)	(61.03 , 90.24)	(61.03 , -90.24)
14	0	(0.00 , -36.32)	(31.21 , -27.86)	(31.21 , 27.86)
14	1	(0.00 , 18.17)	(-12.45 , -13.61)	(-12.45 , 13.61)
14	2	(0.00 , -21.64)	(54.69 , 6.64)	(54.69 , -6.64)
14	3	(0.00 , 79.91)	(-16.98 , 33.60)	(-16.98 , -33.60)
14	4	(0.00 , -22.82)	(-9.85 , 20.78)	(-9.85 , -20.78)
14	5	(0.00 , 29.35)	(-8.65 , 37.22)	(-8.65 , -37.22)
14	6	(0.00 , 15.23)	(-13.76 , -10.64)	(-13.76 , 10.64)
14	7	(0.00 , 88.09)	(111.20 , -41.02)	(111.20 , 41.02)
14	8	(0.00 , 7.58)	(22.96 , -10.25)	(22.96 , 10.25)
14	9	(0.00 , -51.06)	(64.96 , 2.04)	(64.96 , -2.04)
14	10	(0.00 , -22.25)	(-35.51 , 112.20)	(-35.51 , -112.20)
14	11	(0.00 , 191.23)	(-29.35 , 193.01)	(-29.35 , -193.01)
14	12	(0.00 , 0.19)	(163.34 , -23.58)	(163.34 , 23.58)
14	13	(0.00 , 168.35)	(-79.38 , -15.78)	(-79.38 , 15.78)

14	14	(0.00 , -290.82)	(214.38 , 21.57)	(214.38 , -21.57)
14	15	(0.00 , -10.76)	(-4.86 , -48.97)	(-4.86 , 48.97)
14	16	(0.00 , 26.05)	(51.68 , 7.04)	(51.68 , -7.04)
14	17	(0.00 , 4.61)	(8.45 , 0.34)	(8.45 , -0.34)
14	18	(0.00 , 38.07)	(-31.73 , 15.82)	(-31.73 , -15.82)
14	19	(0.00 , 13.38)	(-0.41 , -28.57)	(-0.41 , 28.57)
14	20	(0.00 , 0.70)	(-20.35 , -15.32)	(-20.35 , 15.32)
15	0	(0.00 , 10.84)	(0.69 , -6.02)	(0.69 , 6.02)
15	1	(0.00 , -8.60)	(25.06 , -3.40)	(25.06 , 3.40)
15	2	(0.00 , 17.85)	(-35.16 , -13.52)	(-35.16 , 13.52)
15	3	(0.00 , -54.85)	(23.62 , 3.22)	(23.62 , -3.22)
15	4	(0.00 , 0.31)	(-6.33 , -6.92)	(-6.33 , 6.92)
15	5	(0.00 , -25.47)	(18.31 , -13.92)	(18.31 , 13.92)
15	6	(0.00 , 12.35)	(-2.10 , 11.46)	(-2.10 , -11.46)
15	7	(0.00 , -24.41)	(-35.25 , 15.75)	(-35.25 , -15.75)
15	8	(0.00 , -16.43)	(-3.10 , -26.22)	(-3.10 , 26.22)
15	9	(0.00 , 26.09)	(-11.96 , -1.19)	(-11.96 , 1.19)
15	10	(0.00 , 12.99)	(-37.96 , -23.65)	(-37.96 , 23.65)
15	11	(0.00 , 20.59)	(-24.07 , -61.41)	(-24.07 , 61.41)
15	12	(0.00 , -17.16)	(-21.08 , 7.00)	(-21.08 , -7.00)
15	13	(0.00 , -32.77)	(5.53 , 6.03)	(5.53 , -6.03)
15	14	(0.00 , 66.68)	(-53.76 , -2.41)	(-53.76 , 2.41)
15	15	(0.00 , -5.26)	(3.98 , -4.50)	(3.98 , 4.50)
15	16	(0.00 , 14.75)	(-24.92 , 2.07)	(-24.92 , -2.07)
15	17	(0.00 , -21.62)	(-8.60 , 7.10)	(-8.60 , -7.10)
15	18	(0.00 , -4.07)	(0.80 , -4.08)	(0.80 , 4.08)
15	19	(0.00 , -6.91)	(6.81 , -3.84)	(6.81 , 3.84)
15	20	(0.00 , -1.06)	(11.10 , 9.09)	(11.10 , -9.09)
16	0	(0.00 , -48.46)	(86.01 , -41.38)	(86.01 , 41.38)
16	1	(0.00 , -120.20)	(275.75 , -26.04)	(275.75 , 26.04)
16	2	(0.00 , 1.05)	(-51.47 , -161.19)	(-51.47 , 161.19)
16	3	(0.00 , -82.01)	(43.99 , 25.14)	(43.99 , -25.14)
16	4	(0.00 , -46.03)	(11.65 , -38.84)	(11.65 , 38.84)
16	5	(0.00 , -59.97)	(56.57 , -26.16)	(56.57 , 26.16)
16	6	(0.00 , 80.59)	(-5.84 , 38.26)	(-5.84 , -38.26)
16	7	(0.00 , 211.25)	(-64.64 , -22.94)	(-64.64 , 22.94)
16	8	(0.00 , 30.76)	(-3.64 , -24.51)	(-3.64 , 24.51)
16	9	(0.00 , 6.62)	(18.85 , -71.87)	(18.85 , 71.87)
16	10	(0.00 , 14.15)	(-53.45 , 203.84)	(-53.45 , -203.84)
16	11	(0.00 , 143.82)	(-57.42 , 70.19)	(-57.42 , -70.19)
16	12	(0.00 , -54.07)	(87.70 , 9.72)	(87.70 , -9.72)
16	13	(0.00 , 38.71)	(-14.64 , -36.06)	(-14.64 , 36.06)
16	14	(0.00 , -87.50)	(60.26 , -1.92)	(60.26 , 1.92)
16	15	(0.00 , 10.69)	(-9.16 , -0.17)	(-9.16 , 0.17)

16	16	(0.00 , 69.53)	(3.52 , 25.83)	(3.52 , -25.83)
16	17	(0.00 , 52.85)	(-16.88 , 1.76)	(-16.88 , -1.76)
16	18	(0.00 , 23.23)	(-79.58 , 19.18)	(-79.58 , -19.18)
16	19	(0.00 , -1.66)	(5.34 , -15.29)	(5.34 , 15.29)
16	20	(0.00 , -18.81)	(47.79 , 1.14)	(47.79 , -1.14)
17	0	(0.00 , 67.23)	(-170.47 , 114.89)	(-170.47 , -114.89)
17	1	(0.00 , 261.65)	(-662.84 , 65.13)	(-662.84 , -65.13)
17	2	(0.00 , -32.37)	(114.70 , 453.21)	(114.70 , -453.21)
17	3	(0.00 , 186.84)	(-168.78 , -26.66)	(-168.78 , 26.66)
17	4	(0.00 , 279.75)	(-28.83 , 44.69)	(-28.83 , -44.69)
17	5	(0.00 , 112.22)	(-108.76 , -223.32)	(-108.76 , 223.32)
17	6	(0.00 , -217.70)	(91.22 , -161.25)	(91.22 , 161.25)
17	7	(0.00 , -601.87)	(743.19 , -37.25)	(743.19 , 37.25)
17	8	(0.00 , -159.01)	(156.62 , -50.36)	(156.62 , 50.36)
17	9	(0.00 , -128.34)	(110.08 , 344.08)	(110.08 , -344.08)
17	10	(0.00 , -108.41)	(187.42 , -491.02)	(187.42 , 491.02)
17	11	(0.00 , -213.64)	(182.98 , 674.82)	(182.98 , -674.82)
17	12	(0.00 , 179.17)	(-189.88 , -103.85)	(-189.88 , 103.85)
17	13	(0.00 , 68.75)	(-115.64 , 136.33)	(-115.64 , -136.33)
17	14	(0.00 , -23.15)	(-3.42 , -27.25)	(-3.42 , 27.25)
17	15	(0.00 , -0.03)	(-1.56 , 14.74)	(-1.56 , -14.74)
17	16	(0.00 , -189.67)	(80.52 , -3.62)	(80.52 , 3.62)
17	17	(0.00 , -84.13)	(90.77 , -14.92)	(90.77 , 14.92)
17	18	(0.00 , -51.77)	(215.62 , 14.76)	(215.62 , -14.76)
17	19	(0.00 , 2.91)	(-20.33 , 96.44)	(-20.33 , -96.44)
17	20	(0.00 , 63.00)	(-78.78 , 49.16)	(-78.78 , -49.16)
18	0	(0.00 , 40.87)	(-147.11 , -162.91)	(-147.11 , 162.91)
18	1	(0.00 , 336.34)	(-679.02 , 16.07)	(-679.02 , -16.07)
18	2	(0.00 , -156.33)	(270.05 , 324.16)	(270.05 , -324.16)
18	3	(0.00 , 123.70)	(-62.44 , 63.46)	(-62.44 , -63.46)
18	4	(0.00 , 73.90)	(71.50 , 84.13)	(71.50 , -84.13)
18	5	(0.00 , 33.61)	(-28.49 , -89.87)	(-28.49 , 89.87)
18	6	(0.00 , 97.48)	(-102.75 , 229.44)	(-102.75 , -229.44)
18	7	(0.00 , 1116.85)	(-848.57 , 52.60)	(-848.57 , -52.60)
18	8	(0.00 , 227.30)	(-198.79 , -17.18)	(-198.79 , 17.18)
18	9	(0.00 , -97.57)	(-62.16 , -459.95)	(-62.16 , 459.95)
18	10	(0.00 , 100.38)	(61.30 , 775.81)	(61.30 , -775.81)
18	11	(0.00 , -110.46)	(57.76 , -448.57)	(57.76 , 448.57)
18	12	(0.00 , -113.56)	(241.67 , 190.41)	(241.67 , -190.41)
18	13	(0.00 , 20.57)	(66.86 , -115.89)	(66.86 , 115.89)
18	14	(0.00 , -174.60)	(190.28 , -48.99)	(190.28 , 48.99)
18	15	(0.00 , -17.83)	(10.13 , -14.09)	(10.13 , 14.09)
18	16	(0.00 , 63.84)	(-53.18 , -85.69)	(-53.18 , 85.69)
18	17	(0.00 , 81.20)	(-69.29 , -24.72)	(-69.29 , 24.72)

18	18	(0.00 , -37.26)	(121.69 , -2.34)	(121.69 , 2.34)
18	19	(0.00 , -46.02)	(15.36 , -122.42)	(15.36 , 122.42)
18	20	(0.00 , 65.95)	(-36.07 , 87.97)	(-36.07 , -87.97)
19	0	(0.00 , -65.50)	(78.29 , 165.67)	(78.29 , -165.67)
19	1	(0.00 , 6.56)	(46.17 , 3.87)	(46.17 , -3.87)
19	2	(0.00 , 67.07)	(-73.45 , -49.77)	(-73.45 , 49.77)
19	3	(0.00 , -57.29)	(46.35 , -49.39)	(46.35 , 49.39)
19	4	(0.00 , -61.20)	(-79.15 , 2.48)	(-79.15 , -2.48)
19	5	(0.00 , -19.27)	(54.48 , 216.75)	(54.48 , -216.75)
19	6	(0.00 , 86.61)	(-43.90 , 42.04)	(-43.90 , -42.04)
19	7	(0.00 , -248.64)	(139.86 , -67.76)	(139.86 , 67.76)
19	8	(0.00 , -36.17)	(16.95 , -3.75)	(16.95 , 3.75)
19	9	(0.00 , 141.32)	(-121.12 , 88.46)	(-121.12 , -88.46)
19	10	(0.00 , 8.19)	(-119.90 , -198.39)	(-119.90 , 198.39)
19	11	(0.00 , 84.09)	(-22.15 , -36.36)	(-22.15 , 36.36)
19	12	(0.00 , 0.95)	(-12.48 , -203.47)	(-12.48 , 203.47)
19	13	(0.00 , -0.99)	(-36.88 , -67.61)	(-36.88 , 67.61)
19	14	(0.00 , 5.68)	(-22.39 , 115.55)	(-22.39 , -115.55)
19	15	(0.00 , 22.06)	(-6.25 , 3.31)	(-6.25 , -3.31)
19	16	(0.00 , -11.71)	(-12.69 , -37.21)	(-12.69 , 37.21)
19	17	(0.00 , 1.64)	(4.42 , 8.34)	(4.42 , -8.34)
19	18	(0.00 , 55.48)	(-82.89 , -43.47)	(-82.89 , 43.47)
19	19	(0.00 , 9.45)	(5.12 , 21.82)	(5.12 , -21.82)
19	20	(0.00 , -68.41)	(-6.58 , -11.60)	(-6.58 , 11.60)
20	0	(0.00 , 212.44)	(-73.36 , 59.79)	(-73.36 , -59.79)
20	1	(0.00 , 314.34)	(-405.85 , -15.69)	(-405.85 , 15.69)
20	2	(0.00 , -118.77)	(164.59 , 117.46)	(164.59 , -117.46)
20	3	(0.00 , 143.80)	(-90.58 , 118.41)	(-90.58 , -118.41)
20	4	(0.00 , 174.36)	(-18.02 , 45.85)	(-18.02 , -45.85)
20	5	(0.00 , -241.13)	(251.84 , -129.94)	(251.84 , 129.94)
20	6	(0.00 , 24.81)	(81.81 , -6.08)	(81.81 , 6.08)
20	7	(0.00 , 9.73)	(167.64 , 16.65)	(167.64 , -16.65)
20	8	(0.00 , -50.67)	(56.04 , -18.52)	(56.04 , 18.52)
20	9	(0.00 , -488.47)	(239.45 , 107.26)	(239.45 , -107.26)
20	10	(0.00 , -164.64)	(14.21 , 4.65)	(14.21 , -4.65)
20	11	(0.00 , 202.31)	(-53.49 , 351.69)	(-53.49 , -351.69)
20	12	(0.00 , -41.99)	(-30.54 , 413.80)	(-30.54 , -413.80)
20	13	(0.00 , 49.81)	(60.13 , -34.14)	(60.13 , 34.14)
20	14	(0.00 , 142.39)	(28.96 , 203.51)	(28.96 , -203.51)
20	15	(0.00 , -18.72)	(4.40 , -1.32)	(4.40 , 1.32)
20	16	(0.00 , -35.08)	(59.41 , 90.13)	(59.41 , -90.13)
20	17	(0.00 , -36.37)	(27.59 , -21.93)	(27.59 , 21.93)
20	18	(0.00 , -318.84)	(199.82 , -4.04)	(199.82 , 4.04)
20	19	(0.00 , 12.36)	(-4.80 , 20.50)	(-4.80 , -20.50)

20	20	(0.00 , -42.22)	(224.61 , 48.16)	(224.61 , -48.16)

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T	S	MS= 0	-1	+1
1	0	(0.00 , 24.80)	(13.28 , -20.00)	(13.28 , 20.00)
1	1	(0.00 , 175.31)	(163.25 , 33.16)	(163.25 , -33.16)
1	2	(0.00 , 30.13)	(24.71 , 1.36)	(24.71 , -1.36)
1	3	(0.00 , -8.38)	(3.70 , -16.10)	(3.70 , 16.10)
1	4	(0.00 , -11.74)	(-12.71 , 2.54)	(-12.71 , -2.54)
1	5	(0.00 , -53.93)	(-3.05 , 5.38)	(-3.05 , -5.38)
1	6	(0.00 , 2.30)	(0.25 , -1.27)	(0.25 , 1.27)
1	7	(0.00 , -12.71)	(-1.81 , 6.72)	(-1.81 , -6.72)
1	8	(0.00 , -9.22)	(-6.68 , 1.11)	(-6.68 , -1.11)
1	9	(0.00 , 95.57)	(-11.03 , 8.39)	(-11.03 , -8.39)
1	10	(0.00 , 3.80)	(-12.87 , -7.25)	(-12.87 , 7.25)
1	11	(0.00 , -7.63)	(13.57 , 4.69)	(13.57 , -4.69)
1	12	(0.00 , 19.88)	(-33.83 , -16.00)	(-33.83 , 16.00)
1	13	(0.00 , 31.08)	(-1.49 , 1.72)	(-1.49 , -1.72)
1	14	(0.00 , 14.59)	(7.36 , -6.87)	(7.36 , 6.87)
1	15	(0.00 , -27.24)	(-3.46 , -11.32)	(-3.46 , 11.32)
1	16	(0.00 , -5.24)	(5.38 , 7.03)	(5.38 , -7.03)
1	17	(0.00 , 73.25)	(-20.47 , 14.20)	(-20.47 , -14.20)
1	18	(0.00 , 38.02)	(20.32 , -29.30)	(20.32 , 29.30)
1	19	(0.00 , -14.72)	(-13.88 , 6.26)	(-13.88 , -6.26)
1	20	(0.00 , -11.26)	(2.64 , 24.96)	(2.64 , -24.96)
2	0	(0.00 , 43.32)	(27.74 , 43.73)	(27.74 , -43.73)
2	1	(0.00 , -37.44)	(-44.33 , -28.92)	(-44.33 , 28.92)
2	2	(0.00 , 123.50)	(125.96 , 41.40)	(125.96 , -41.40)
2	3	(0.00 , -128.44)	(-67.18 , -16.11)	(-67.18 , 16.11)
2	4	(0.00 , 35.10)	(24.99 , 5.14)	(24.99 , -5.14)
2	5	(0.00 , 72.43)	(32.43 , 0.87)	(32.43 , -0.87)
2	6	(0.00 , -11.66)	(5.28 , -0.79)	(5.28 , 0.79)
2	7	(0.00 , 0.08)	(-1.57 , 2.78)	(-1.57 , -2.78)
2	8	(0.00 , 9.42)	(0.92 , 1.04)	(0.92 , -1.04)
2	9	(0.00 , -65.40)	(5.83 , 17.35)	(5.83 , -17.35)
2	10	(0.00 , -20.02)	(-4.86 , 12.19)	(-4.86 , -12.19)
2	11	(0.00 , -7.31)	(-2.03 , -0.39)	(-2.03 , 0.39)
2	12	(0.00 , 46.32)	(7.21 , 14.54)	(7.21 , -14.54)
2	13	(0.00 , 75.93)	(-7.81 , -0.80)	(-7.81 , 0.80)
2	14	(0.00 , 20.54)	(12.68 , 18.20)	(12.68 , -18.20)
2	15	(0.00 , -7.01)	(3.74 , -14.75)	(3.74 , 14.75)
2	16	(0.00 , 15.66)	(-7.11 , 1.66)	(-7.11 , -1.66)
2	17	(0.00 , -64.06)	(-6.54 , -5.39)	(-6.54 , 5.39)

2	18	(0.00 , 47.05)	(4.78 , 6.22)	(4.78 , -6.22)
2	19	(0.00 , -25.07)	(-16.36 , 4.12)	(-16.36 , -4.12)
2	20	(0.00 , -41.30)	(17.04 , -36.41)	(17.04 , 36.41)
3	0	(0.00 , 11.81)	(-3.86 , 0.63)	(-3.86 , -0.63)
3	1	(0.00 , -12.73)	(-11.50 , -2.21)	(-11.50 , 2.21)
3	2	(0.00 , -2.41)	(-0.37 , 0.91)	(-0.37 , -0.91)
3	3	(0.00 , -4.36)	(-2.46 , 1.35)	(-2.46 , -1.35)
3	4	(0.00 , 4.97)	(6.40 , 3.59)	(6.40 , -3.59)
3	5	(0.00 , 14.03)	(8.95 , 0.01)	(8.95 , -0.01)
3	6	(0.00 , 4.63)	(-0.41 , 1.18)	(-0.41 , -1.18)
3	7	(0.00 , -3.74)	(-2.82 , 0.97)	(-2.82 , -0.97)
3	8	(0.00 , 0.69)	(-0.46 , 0.19)	(-0.46 , -0.19)
3	9	(0.00 , -4.38)	(3.72 , 1.94)	(3.72 , -1.94)
3	10	(0.00 , 0.59)	(1.27 , 1.68)	(1.27 , -1.68)
3	11	(0.00 , 5.52)	(4.48 , 0.94)	(4.48 , -0.94)
3	12	(0.00 , -15.75)	(-8.10 , -1.24)	(-8.10 , 1.24)
3	13	(0.00 , 2.07)	(2.76 , 0.05)	(2.76 , -0.05)
3	14	(0.00 , -2.95)	(-1.93 , 1.46)	(-1.93 , -1.46)
3	15	(0.00 , -1.26)	(-1.21 , 1.23)	(-1.21 , -1.23)
3	16	(0.00 , 3.18)	(0.75 , -1.89)	(0.75 , 1.89)
3	17	(0.00 , -4.40)	(2.62 , -2.38)	(2.62 , 2.38)
3	18	(0.00 , -2.51)	(-0.71 , 7.35)	(-0.71 , -7.35)
3	19	(0.00 , 1.88)	(2.18 , 1.51)	(2.18 , -1.51)
3	20	(0.00 , 1.65)	(1.30 , -10.49)	(1.30 , 10.49)
4	0	(0.00 , 178.03)	(-100.76 , 14.60)	(-100.76 , -14.60)
4	1	(0.00 , 30.33)	(30.41 , 4.63)	(30.41 , -4.63)
4	2	(0.00 , -60.69)	(-36.19 , -5.82)	(-36.19 , 5.82)
4	3	(0.00 , -435.26)	(-466.39 , -76.64)	(-466.39 , 76.64)
4	4	(0.00 , 0.21)	(9.82 , 26.84)	(9.82 , -26.84)
4	5	(0.00 , -23.96)	(-18.05 , 18.71)	(-18.05 , -18.71)
4	6	(0.00 , -5.10)	(-6.28 , 2.57)	(-6.28 , -2.57)
4	7	(0.00 , -35.01)	(-9.37 , 8.92)	(-9.37 , -8.92)
4	8	(0.00 , 9.15)	(6.02 , 7.27)	(6.02 , -7.27)
4	9	(0.00 , -4.90)	(-6.71 , 83.49)	(-6.71 , -83.49)
4	10	(0.00 , 47.06)	(-11.83 , 36.66)	(-11.83 , -36.66)
4	11	(0.00 , 11.03)	(-0.90 , -1.92)	(-0.90 , 1.92)
4	12	(0.00 , 10.34)	(12.94 , 18.49)	(12.94 , -18.49)
4	13	(0.00 , -0.65)	(-1.16 , 30.30)	(-1.16 , -30.30)
4	14	(0.00 , 30.70)	(13.38 , 5.56)	(13.38 , -5.56)
4	15	(0.00 , 28.03)	(15.56 , -10.26)	(15.56 , 10.26)
4	16	(0.00 , -5.34)	(-7.54 , -7.53)	(-7.54 , 7.53)
4	17	(0.00 , -119.29)	(-55.61 , 53.41)	(-55.61 , -53.41)
4	18	(0.00 , 143.83)	(72.76 , -26.34)	(72.76 , 26.34)
4	19	(0.00 , -76.33)	(-27.40 , -11.33)	(-27.40 , 11.33)

4	20	(0.00 , -26.56)	(-39.05 , 48.87)	(-39.05 , -48.87)
5	0	(0.00 , 192.11)	(-29.55 , -222.31)	(-29.55 , 222.31)
5	1	(0.00 , 0.70)	(23.59 , 19.82)	(23.59 , -19.82)
5	2	(0.00 , -70.62)	(-57.03 , 15.69)	(-57.03 , -15.69)
5	3	(0.00 , 1.54)	(6.49 , 19.57)	(6.49 , -19.57)
5	4	(0.00 , 200.07)	(200.50 , 39.48)	(200.50 , -39.48)
5	5	(0.00 , 411.23)	(416.81 , 79.63)	(416.81 , -79.63)
5	6	(0.00 , -0.95)	(1.94 , 13.73)	(1.94 , -13.73)
5	7	(0.00 , 27.26)	(-0.11 , 27.12)	(-0.11 , -27.12)
5	8	(0.00 , 4.54)	(-11.15 , -7.97)	(-11.15 , 7.97)
5	9	(0.00 , -21.80)	(-38.16 , 20.42)	(-38.16 , -20.42)
5	10	(0.00 , -13.59)	(4.00 , 4.00)	(4.00 , -4.00)
5	11	(0.00 , 1.74)	(6.36 , -4.86)	(6.36 , 4.86)
5	12	(0.00 , -25.04)	(-17.18 , -12.89)	(-17.18 , 12.89)
5	13	(0.00 , 7.90)	(29.12 , -59.71)	(29.12 , 59.71)
5	14	(0.00 , 6.66)	(-9.33 , 63.58)	(-9.33 , -63.58)
5	15	(0.00 , -36.77)	(1.64 , 5.88)	(1.64 , -5.88)
5	16	(0.00 , 18.69)	(-4.64 , -36.11)	(-4.64 , 36.11)
5	17	(0.00 , -6.62)	(14.40 , -44.18)	(14.40 , 44.18)
5	18	(0.00 , -37.47)	(-0.54 , 177.22)	(-0.54 , -177.22)
5	19	(0.00 , -9.28)	(-3.48 , 33.11)	(-3.48 , -33.11)
5	20	(0.00 , 39.11)	(14.00 , -280.24)	(14.00 , 280.24)
6	0	(0.00 , 77.19)	(71.59 , -333.19)	(71.59 , 333.19)
6	1	(0.00 , 339.14)	(383.07 , 67.30)	(383.07 , -67.30)
6	2	(0.00 , 61.98)	(64.89 , 66.82)	(64.89 , -66.82)
6	3	(0.00 , -3.89)	(25.80 , 3.54)	(25.80 , -3.54)
6	4	(0.00 , 19.92)	(-18.18 , 9.85)	(-18.18 , -9.85)
6	5	(0.00 , 0.76)	(27.32 , 19.05)	(27.32 , -19.05)
6	6	(0.00 , -4.77)	(1.40 , 6.87)	(1.40 , -6.87)
6	7	(0.00 , -10.91)	(-13.87 , 31.59)	(-13.87 , -31.59)
6	8	(0.00 , -9.86)	(3.85 , -3.20)	(3.85 , 3.20)
6	9	(0.00 , 150.35)	(-53.37 , 8.53)	(-53.37 , -8.53)
6	10	(0.00 , 8.14)	(-18.18 , -41.64)	(-18.18 , 41.64)
6	11	(0.00 , -20.82)	(20.87 , -1.77)	(20.87 , 1.77)
6	12	(0.00 , 81.96)	(-55.14 , -27.10)	(-55.14 , 27.10)
6	13	(0.00 , 60.52)	(-9.47 , -9.06)	(-9.47 , 9.06)
6	14	(0.00 , 24.96)	(3.58 , -7.58)	(3.58 , 7.58)
6	15	(0.00 , -74.52)	(9.62 , -12.52)	(9.62 , 12.52)
6	16	(0.00 , -2.76)	(5.71 , 2.02)	(5.71 , -2.02)
6	17	(0.00 , 130.07)	(-50.69 , 15.12)	(-50.69 , -15.12)
6	18	(0.00 , 36.43)	(45.39 , 25.63)	(45.39 , -25.63)
6	19	(0.00 , -24.86)	(-30.28 , 17.63)	(-30.28 , -17.63)
6	20	(0.00 , -13.03)	(4.03 , -49.79)	(4.03 , 49.79)
7	0	(0.00 , 109.37)	(-148.29 , -340.55)	(-148.29 , 340.55)

7	1	(0.00 , 74.27)	(100.29 , 28.96)	(100.29 , -28.96)
7	2	(0.00 , -333.67)	(-353.44 , -29.45)	(-353.44 , 29.45)
7	3	(0.00 , -7.22)	(-3.45 , 25.21)	(-3.45 , -25.21)
7	4	(0.00 , -11.25)	(-28.38 , 7.73)	(-28.38 , -7.73)
7	5	(0.00 , -26.64)	(-27.29 , 19.99)	(-27.29 , -19.99)
7	6	(0.00 , 21.17)	(-23.11 , 2.75)	(-23.11 , -2.75)
7	7	(0.00 , -28.00)	(-27.45 , 22.77)	(-27.45 , -22.77)
7	8	(0.00 , -34.75)	(-12.56 , -6.29)	(-12.56 , 6.29)
7	9	(0.00 , 82.87)	(-26.19 , -1.38)	(-26.19 , 1.38)
7	10	(0.00 , 47.51)	(8.02 , 2.13)	(8.02 , -2.13)
7	11	(0.00 , 4.40)	(8.28 , 10.03)	(8.28 , -10.03)
7	12	(0.00 , -50.28)	(-4.66 , -19.88)	(-4.66 , 19.88)
7	13	(0.00 , -157.20)	(39.67 , 21.63)	(39.67 , -21.63)
7	14	(0.00 , -18.92)	(-53.74 , -23.64)	(-53.74 , 23.64)
7	15	(0.00 , 25.84)	(-11.62 , 23.50)	(-11.62 , -23.50)
7	16	(0.00 , -42.60)	(28.79 , -10.96)	(28.79 , 10.96)
7	17	(0.00 , 42.44)	(0.67 , 14.80)	(0.67 , -14.80)
7	18	(0.00 , 27.35)	(3.47 , 24.46)	(3.47 , -24.46)
7	19	(0.00 , 7.58)	(22.95 , 3.25)	(22.95 , -3.25)
7	20	(0.00 , -24.27)	(-43.40 , -17.84)	(-43.40 , 17.84)
8	0	(0.00 , -113.27)	(42.06 , -122.55)	(42.06 , 122.55)
8	1	(0.00 , 32.22)	(35.07 , 3.35)	(35.07 , -3.35)
8	2	(0.00 , -4.05)	(-21.92 , 10.46)	(-21.92 , -10.46)
8	3	(0.00 , 8.23)	(3.91 , 2.52)	(3.91 , -2.52)
8	4	(0.00 , 3.55)	(3.68 , -2.16)	(3.68 , 2.16)
8	5	(0.00 , -5.22)	(25.80 , 12.38)	(25.80 , -12.38)
8	6	(0.00 , 4.26)	(-4.91 , -8.75)	(-4.91 , 8.75)
8	7	(0.00 , 21.79)	(13.78 , -1.05)	(13.78 , 1.05)
8	8	(0.00 , -14.09)	(-6.37 , -12.97)	(-6.37 , 12.97)
8	9	(0.00 , -38.62)	(-58.16 , -13.08)	(-58.16 , 13.08)
8	10	(0.00 , -12.25)	(-15.16 , -7.42)	(-15.16 , 7.42)
8	11	(0.00 , -80.12)	(-49.76 , -2.00)	(-49.76 , 2.00)
8	12	(0.00 , 169.12)	(131.10 , 18.30)	(131.10 , -18.30)
8	13	(0.00 , -23.44)	(-17.03 , -11.80)	(-17.03 , 11.80)
8	14	(0.00 , 52.04)	(25.77 , -1.11)	(25.77 , 1.11)
8	15	(0.00 , 21.88)	(16.00 , 0.64)	(16.00 , -0.64)
8	16	(0.00 , -28.27)	(-19.05 , -6.94)	(-19.05 , 6.94)
8	17	(0.00 , -1.80)	(-16.76 , 7.22)	(-16.76 , -7.22)
8	18	(0.00 , 24.60)	(11.75 , -23.65)	(11.75 , 23.65)
8	19	(0.00 , -14.55)	(-11.67 , -10.95)	(-11.67 , 10.95)
8	20	(0.00 , -3.03)	(-2.24 , 46.51)	(-2.24 , -46.51)
9	0	(0.00 , -70.91)	(19.37 , -118.13)	(19.37 , 118.13)
9	1	(0.00 , 30.07)	(36.37 , 8.82)	(36.37 , -8.82)
9	2	(0.00 , -14.30)	(-34.31 , 15.57)	(-34.31 , -15.57)

9	3	(0.00 , 8.20)	(-21.22 , 0.49)	(-21.22 , -0.49)
9	4	(0.00 , -1.40)	(-5.74 , 1.76)	(-5.74 , -1.76)
9	5	(0.00 , -7.61)	(1.91 , 12.47)	(1.91 , -12.47)
9	6	(0.00 , -15.73)	(-4.69 , 8.42)	(-4.69 , -8.42)
9	7	(0.00 , 2.32)	(-3.09 , -0.06)	(-3.09 , 0.06)
9	8	(0.00 , -23.43)	(-13.09 , -9.09)	(-13.09 , 9.09)
9	9	(0.00 , -31.15)	(-49.83 , -8.76)	(-49.83 , 8.76)
9	10	(0.00 , -6.59)	(-7.88 , -5.53)	(-7.88 , 5.53)
9	11	(0.00 , -58.55)	(-47.90 , -12.89)	(-47.90 , 12.89)
9	12	(0.00 , 152.34)	(113.15 , 6.64)	(113.15 , -6.64)
9	13	(0.00 , -36.42)	(-20.54 , -3.28)	(-20.54 , 3.28)
9	14	(0.00 , 24.07)	(4.41 , -8.10)	(4.41 , 8.10)
9	15	(0.00 , 14.78)	(9.42 , 1.07)	(9.42 , -1.07)
9	16	(0.00 , -23.21)	(-10.12 , 4.72)	(-10.12 , -4.72)
9	17	(0.00 , -2.80)	(-16.32 , 9.45)	(-16.32 , -9.45)
9	18	(0.00 , 28.32)	(1.88 , -26.74)	(1.88 , 26.74)
9	19	(0.00 , -7.81)	(-5.16 , -12.39)	(-5.16 , 12.39)
9	20	(0.00 , -37.59)	(-16.26 , 51.47)	(-16.26 , -51.47)
10	0	(0.00 , 43.86)	(-41.09 , 140.18)	(-41.09 , -140.18)
10	1	(0.00 , -7.12)	(0.95 , 40.47)	(0.95 , -40.47)
10	2	(0.00 , 56.21)	(51.56 , -54.55)	(51.56 , 54.55)
10	3	(0.00 , 98.65)	(-40.98 , 0.28)	(-40.98 , -0.28)
10	4	(0.00 , -8.32)	(44.37 , 4.35)	(44.37 , -4.35)
10	5	(0.00 , -15.33)	(80.32 , 9.59)	(80.32 , -9.59)
10	6	(0.00 , -7.18)	(3.01 , -0.09)	(3.01 , 0.09)
10	7	(0.00 , 30.61)	(22.65 , -13.54)	(22.65 , 13.54)
10	8	(0.00 , 51.09)	(29.73 , 3.36)	(29.73 , -3.36)
10	9	(0.00 , 18.15)	(8.14 , 5.55)	(8.14 , -5.55)
10	10	(0.00 , -31.38)	(-13.61 , -2.37)	(-13.61 , 2.37)
10	11	(0.00 , 26.86)	(20.75 , 1.68)	(20.75 , -1.68)
10	12	(0.00 , -47.48)	(-48.14 , -7.03)	(-48.14 , 7.03)
10	13	(0.00 , 66.55)	(29.99 , -4.91)	(29.99 , 4.91)
10	14	(0.00 , 52.31)	(52.34 , 27.44)	(52.34 , -27.44)
10	15	(0.00 , -14.11)	(5.86 , -1.47)	(5.86 , 1.47)
10	16	(0.00 , -12.40)	(-20.89 , -14.12)	(-20.89 , 14.12)
10	17	(0.00 , 25.81)	(0.70 , 2.28)	(0.70 , -2.28)
10	18	(0.00 , -6.69)	(19.38 , 30.41)	(19.38 , -30.41)
10	19	(0.00 , 9.15)	(-2.57 , 12.41)	(-2.57 , -12.41)
10	20	(0.00 , 29.61)	(24.28 , -50.31)	(24.28 , 50.31)
11	0	(0.00 , -47.38)	(34.66 , -241.94)	(34.66 , 241.94)
11	1	(0.00 , 47.98)	(74.03 , -0.62)	(74.03 , 0.62)
11	2	(0.00 , 13.42)	(17.99 , 65.71)	(17.99 , -65.71)
11	3	(0.00 , 0.59)	(14.65 , 17.87)	(14.65 , -17.87)
11	4	(0.00 , 5.23)	(-37.94 , -0.96)	(-37.94 , 0.96)

11	5	(0.00 , 3.82)	(-70.64 , 0.00)	(-70.64 , -0.00)
11	6	(0.00 , -12.38)	(-9.90 , 3.22)	(-9.90 , -3.22)
11	7	(0.00 , -22.22)	(-29.76 , 10.41)	(-29.76 , -10.41)
11	8	(0.00 , -31.18)	(-9.86 , -20.96)	(-9.86 , 20.96)
11	9	(0.00 , 6.82)	(-8.98 , -7.65)	(-8.98 , 7.65)
11	10	(0.00 , -38.46)	(-36.13 , -18.03)	(-36.13 , 18.03)
11	11	(0.00 , 3.86)	(11.07 , -0.17)	(11.07 , 0.17)
11	12	(0.00 , 23.62)	(-5.95 , -3.77)	(-5.95 , 3.77)
11	13	(0.00 , 64.61)	(42.99 , 15.81)	(42.99 , -15.81)
11	14	(0.00 , 125.34)	(84.75 , -2.41)	(84.75 , 2.41)
11	15	(0.00 , -5.79)	(6.46 , 2.38)	(6.46 , -2.38)
11	16	(0.00 , -46.14)	(-35.01 , -6.24)	(-35.01 , 6.24)
11	17	(0.00 , -7.63)	(-12.21 , 3.91)	(-12.21 , -3.91)
11	18	(0.00 , 61.39)	(31.60 , 5.10)	(31.60 , -5.10)
11	19	(0.00 , -31.97)	(-34.52 , -17.75)	(-34.52 , 17.75)
11	20	(0.00 , 1.98)	(38.75 , 35.65)	(38.75 , -35.65)
12	0	(0.00 , -75.07)	(66.84 , 25.20)	(66.84 , -25.20)
12	1	(0.00 , 26.75)	(27.56 , 5.88)	(27.56 , -5.88)
12	2	(0.00 , 56.18)	(61.67 , 21.26)	(61.67 , -21.26)
12	3	(0.00 , 21.45)	(-11.79 , -6.14)	(-11.79 , 6.14)
12	4	(0.00 , -14.86)	(-13.68 , 12.48)	(-13.68 , -12.48)
12	5	(0.00 , 3.34)	(-25.72 , -0.05)	(-25.72 , 0.05)
12	6	(0.00 , 4.83)	(3.78 , 1.00)	(3.78 , -1.00)
12	7	(0.00 , 24.10)	(26.10 , 1.90)	(26.10 , -1.90)
12	8	(0.00 , -11.29)	(-8.14 , -2.22)	(-8.14 , 2.22)
12	9	(0.00 , -26.21)	(-28.44 , -5.92)	(-28.44 , 5.92)
12	10	(0.00 , -8.23)	(-4.78 , -6.36)	(-4.78 , 6.36)
12	11	(0.00 , -33.95)	(-37.10 , 1.74)	(-37.10 , -1.74)
12	12	(0.00 , 114.95)	(84.13 , 12.21)	(84.13 , -12.21)
12	13	(0.00 , -4.38)	(-36.17 , -12.32)	(-36.17 , 12.32)
12	14	(0.00 , -2.82)	(3.06 , -9.73)	(3.06 , 9.73)
12	15	(0.00 , -13.24)	(7.83 , -5.98)	(7.83 , 5.98)
12	16	(0.00 , -19.12)	(-12.74 , 9.60)	(-12.74 , -9.60)
12	17	(0.00 , -0.96)	(-15.59 , 5.57)	(-15.59 , -5.57)
12	18	(0.00 , 1.68)	(4.42 , -39.15)	(4.42 , 39.15)
12	19	(0.00 , 4.81)	(0.39 , -9.22)	(0.39 , 9.22)
12	20	(0.00 , -9.68)	(-9.92 , 68.06)	(-9.92 , -68.06)
13	0	(0.00 , -128.64)	(-98.24 , -63.61)	(-98.24 , 63.61)
13	1	(0.00 , -29.53)	(-70.79 , -31.99)	(-70.79 , 31.99)
13	2	(0.00 , -165.48)	(-209.34 , -40.68)	(-209.34 , 40.68)
13	3	(0.00 , -60.45)	(49.80 , -2.50)	(49.80 , 2.50)
13	4	(0.00 , -1.06)	(-1.33 , -6.96)	(-1.33 , 6.96)
13	5	(0.00 , 3.10)	(-2.99 , -19.96)	(-2.99 , 19.96)
13	6	(0.00 , -8.13)	(-28.99 , -4.74)	(-28.99 , 4.74)

13	7	(0.00 , -78.53)	(-89.76 , -32.38)	(-89.76 , 32.38)
13	8	(0.00 , 20.83)	(16.11 , -14.18)	(16.11 , 14.18)
13	9	(0.00 , -16.91)	(-28.78 , -14.51)	(-28.78 , 14.51)
13	10	(0.00 , -5.09)	(-23.70 , 9.23)	(-23.70 , -9.23)
13	11	(0.00 , -8.72)	(-10.88 , 5.83)	(-10.88 , -5.83)
13	12	(0.00 , 29.57)	(68.98 , 12.75)	(68.98 , -12.75)
13	13	(0.00 , -46.93)	(60.14 , 17.54)	(60.14 , -17.54)
13	14	(0.00 , 101.52)	(56.74 , 17.68)	(56.74 , -17.68)
13	15	(0.00 , 44.27)	(1.41 , 18.76)	(1.41 , -18.76)
13	16	(0.00 , -76.81)	(-25.42 , -20.74)	(-25.42 , 20.74)
13	17	(0.00 , -34.86)	(3.53 , 6.20)	(3.53 , -6.20)
13	18	(0.00 , 62.47)	(-3.23 , -15.66)	(-3.23 , 15.66)
13	19	(0.00 , -52.39)	(-35.37 , -7.65)	(-35.37 , 7.65)
13	20	(0.00 , 11.12)	(31.38 , 17.17)	(31.38 , -17.17)
14	0	(0.00 , -101.15)	(59.50 , 86.79)	(59.50 , -86.79)
14	1	(0.00 , 21.88)	(14.01 , -1.47)	(14.01 , 1.47)
14	2	(0.00 , 57.21)	(46.93 , 1.81)	(46.93 , -1.81)
14	3	(0.00 , 13.24)	(-5.32 , -6.69)	(-5.32 , 6.69)
14	4	(0.00 , -7.49)	(-3.71 , 3.85)	(-3.71 , -3.85)
14	5	(0.00 , -4.99)	(-1.35 , 3.75)	(-1.35 , -3.75)
14	6	(0.00 , -1.23)	(0.74 , -1.72)	(0.74 , 1.72)
14	7	(0.00 , 3.29)	(3.45 , -5.28)	(3.45 , 5.28)
14	8	(0.00 , 3.10)	(2.45 , 3.10)	(2.45 , -3.10)
14	9	(0.00 , -36.99)	(-43.38 , -4.71)	(-43.38 , 4.71)
14	10	(0.00 , 4.91)	(-0.91 , -1.85)	(-0.91 , 1.85)
14	11	(0.00 , -54.49)	(-53.82 , -2.70)	(-53.82 , 2.70)
14	12	(0.00 , 133.17)	(124.40 , 15.92)	(124.40 , -15.92)
14	13	(0.00 , -24.61)	(-47.12 , -11.93)	(-47.12 , 11.93)
14	14	(0.00 , -15.08)	(-11.30 , -14.06)	(-11.30 , 14.06)
14	15	(0.00 , 0.78)	(12.19 , 1.38)	(12.19 , -1.38)
14	16	(0.00 , -1.41)	(-6.49 , 5.47)	(-6.49 , -5.47)
14	17	(0.00 , 0.75)	(-17.65 , 5.47)	(-17.65 , -5.47)
14	18	(0.00 , -4.62)	(-4.28 , -38.92)	(-4.28 , 38.92)
14	19	(0.00 , 4.13)	(-1.55 , -10.33)	(-1.55 , 10.33)
14	20	(0.00 , -20.67)	(-19.44 , 63.16)	(-19.44 , -63.16)
15	0	(0.00 , 92.26)	(-225.42 , 1377.28)	(-225.42 , -1377.28)
15	1	(0.00 , 98.79)	(58.72 , -37.52)	(58.72 , 37.52)
15	2	(0.00 , 63.48)	(20.84 , -223.31)	(20.84 , 223.31)
15	3	(0.00 , 48.56)	(34.83 , 10.93)	(34.83 , -10.93)
15	4	(0.00 , 13.71)	(-9.00 , -0.92)	(-9.00 , 0.92)
15	5	(0.00 , 38.39)	(2.93 , -0.61)	(2.93 , 0.61)
15	6	(0.00 , 2.81)	(-2.89 , -21.23)	(-2.89 , 21.23)
15	7	(0.00 , 19.67)	(-6.94 , -146.89)	(-6.94 , 146.89)
15	8	(0.00 , 127.24)	(7.34 , 41.42)	(7.34 , -41.42)

15	9	(0.00 , -32.33)	(-84.22 , -19.57)	(-84.22 , 19.57)
15	10	(0.00 , 21.70)	(7.12 , 9.74)	(7.12 , -9.74)
15	11	(0.00 , -85.16)	(-97.17 , 0.29)	(-97.17 , -0.29)
15	12	(0.00 , 189.95)	(235.48 , 36.47)	(235.48 , -36.47)
15	13	(0.00 , -55.15)	(-81.09 , -16.94)	(-81.09 , 16.94)
15	14	(0.00 , -36.30)	(-35.35 , -15.53)	(-35.35 , 15.53)
15	15	(0.00 , 9.96)	(27.04 , 14.06)	(27.04 , -14.06)
15	16	(0.00 , 2.23)	(-4.23 , 2.24)	(-4.23 , -2.24)
15	17	(0.00 , 7.49)	(-30.75 , -1.00)	(-30.75 , 1.00)
15	18	(0.00 , 1.41)	(-0.20 , -37.90)	(-0.20 , 37.90)
15	19	(0.00 , 13.24)	(10.91 , -37.39)	(10.91 , 37.39)
15	20	(0.00 , -59.98)	(-53.88 , 56.88)	(-53.88 , -56.88)
16	0	(0.00 , 453.83)	(-443.19 , 1579.34)	(-443.19 , -1579.34)
16	1	(0.00 , 100.35)	(89.58 , -15.89)	(89.58 , 15.89)
16	2	(0.00 , -25.12)	(-4.77 , -263.18)	(-4.77 , 263.18)
16	3	(0.00 , 31.73)	(29.33 , 22.25)	(29.33 , -22.25)
16	4	(0.00 , 23.75)	(-17.89 , -4.75)	(-17.89 , 4.75)
16	5	(0.00 , 38.68)	(-28.51 , -2.01)	(-28.51 , 2.01)
16	6	(0.00 , 2.79)	(7.91 , -31.08)	(7.91 , 31.08)
16	7	(0.00 , 44.49)	(30.59 , -185.88)	(30.59 , 185.88)
16	8	(0.00 , 77.11)	(-87.24 , 16.93)	(-87.24 , -16.93)
16	9	(0.00 , 84.17)	(54.66 , 2.61)	(54.66 , -2.61)
16	10	(0.00 , -8.60)	(-6.49 , 4.20)	(-6.49 , -4.20)
16	11	(0.00 , 62.82)	(77.44 , 27.14)	(77.44 , -27.14)
16	12	(0.00 , -145.92)	(-187.09 , -26.67)	(-187.09 , 26.67)
16	13	(0.00 , 60.97)	(57.03 , 21.37)	(57.03 , -21.37)
16	14	(0.00 , 41.94)	(18.40 , 12.57)	(18.40 , -12.57)
16	15	(0.00 , -14.50)	(-20.60 , -2.74)	(-20.60 , 2.74)
16	16	(0.00 , -7.41)	(3.77 , -2.76)	(3.77 , 2.76)
16	17	(0.00 , 32.29)	(8.12 , -10.64)	(8.12 , 10.64)
16	18	(0.00 , 18.14)	(26.42 , 43.48)	(26.42 , -43.48)
16	19	(0.00 , -13.59)	(-3.69 , -18.61)	(-3.69 , 18.61)
16	20	(0.00 , 15.60)	(17.65 , -70.33)	(17.65 , 70.33)
17	0	(0.00 , 117.72)	(-63.93 , -206.83)	(-63.93 , 206.83)
17	1	(0.00 , -20.88)	(-3.05 , 17.58)	(-3.05 , -17.58)
17	2	(0.00 , 50.18)	(79.03 , 13.32)	(79.03 , -13.32)
17	3	(0.00 , -14.29)	(-33.82 , 9.98)	(-33.82 , -9.98)
17	4	(0.00 , -15.05)	(20.32 , 4.68)	(20.32 , -4.68)
17	5	(0.00 , -39.02)	(30.21 , 12.30)	(30.21 , -12.30)
17	6	(0.00 , -21.55)	(-10.99 , -2.23)	(-10.99 , 2.23)
17	7	(0.00 , -218.84)	(-212.16 , -28.48)	(-212.16 , 28.48)
17	8	(0.00 , -0.01)	(0.00 , -3.43)	(0.00 , 3.43)
17	9	(0.00 , 2.44)	(18.47 , 7.63)	(18.47 , -7.63)
17	10	(0.00 , 33.82)	(41.57 , 3.80)	(41.57 , -3.80)

17	11	(0.00 , 2.40)	(29.39 , 5.48)	(29.39 , -5.48)
17	12	(0.00 , -3.96)	(-43.47 , -13.09)	(-43.47 , 13.09)
17	13	(0.00 , -10.84)	(-60.91 , -13.46)	(-60.91 , 13.46)
17	14	(0.00 , -95.61)	(-98.36 , -10.43)	(-98.36 , 10.43)
17	15	(0.00 , -21.20)	(-8.42 , -8.83)	(-8.42 , 8.83)
17	16	(0.00 , 56.45)	(43.46 , 9.86)	(43.46 , -9.86)
17	17	(0.00 , -1.41)	(7.78 , -1.97)	(7.78 , 1.97)
17	18	(0.00 , -40.96)	(-35.92 , 10.79)	(-35.92 , -10.79)
17	19	(0.00 , 20.78)	(27.81 , 4.74)	(27.81 , -4.74)
17	20	(0.00 , -34.74)	(-62.10 , -26.59)	(-62.10 , 26.59)
18	0	(0.00 , 99.71)	(-49.12 , 126.54)	(-49.12 , -126.54)
18	1	(0.00 , 35.00)	(34.27 , -6.37)	(34.27 , 6.37)
18	2	(0.00 , -45.78)	(-39.35 , -2.34)	(-39.35 , 2.34)
18	3	(0.00 , -13.41)	(28.21 , 0.93)	(28.21 , -0.93)
18	4	(0.00 , 9.39)	(-28.06 , 2.24)	(-28.06 , -2.24)
18	5	(0.00 , 15.90)	(-43.99 , 12.31)	(-43.99 , -12.31)
18	6	(0.00 , -2.65)	(-0.43 , -1.66)	(-0.43 , 1.66)
18	7	(0.00 , 12.43)	(24.12 , -0.21)	(24.12 , 0.21)
18	8	(0.00 , 106.36)	(103.59 , 16.45)	(103.59 , -16.45)
18	9	(0.00 , 12.92)	(-8.26 , 1.60)	(-8.26 , -1.60)
18	10	(0.00 , 32.57)	(18.97 , 1.18)	(18.97 , -1.18)
18	11	(0.00 , -4.59)	(-23.88 , 3.73)	(-23.88 , -3.73)
18	12	(0.00 , 3.31)	(39.77 , -9.42)	(39.77 , 9.42)
18	13	(0.00 , -53.02)	(-41.76 , 3.89)	(-41.76 , -3.89)
18	14	(0.00 , -29.94)	(-54.25 , -24.03)	(-54.25 , 24.03)
18	15	(0.00 , 0.80)	(6.66 , 5.71)	(6.66 , -5.71)
18	16	(0.00 , 9.62)	(29.41 , 9.06)	(29.41 , -9.06)
18	17	(0.00 , 9.69)	(-15.37 , 4.65)	(-15.37 , -4.65)
18	18	(0.00 , -12.19)	(1.54 , -27.34)	(1.54 , 27.34)
18	19	(0.00 , 7.93)	(24.15 , -8.50)	(24.15 , 8.50)
18	20	(0.00 , 1.50)	(-54.92 , 58.10)	(-54.92 , -58.10)
19	0	(0.00 , -603.47)	(195.89 , 381.01)	(195.89 , -381.01)
19	1	(0.00 , 17.94)	(15.76 , -19.42)	(15.76 , 19.42)
19	2	(0.00 , 67.53)	(33.26 , -41.65)	(33.26 , 41.65)
19	3	(0.00 , -0.72)	(-41.46 , -18.49)	(-41.46 , 18.49)
19	4	(0.00 , 8.53)	(10.06 , -17.83)	(10.06 , 17.83)
19	5	(0.00 , 11.93)	(13.96 , -41.40)	(13.96 , 41.40)
19	6	(0.00 , -2.82)	(-9.23 , -6.87)	(-9.23 , 6.87)
19	7	(0.00 , 73.84)	(53.01 , -6.44)	(53.01 , 6.44)
19	8	(0.00 , 36.10)	(21.80 , 27.97)	(21.80 , -27.97)
19	9	(0.00 , -15.44)	(-34.65 , 0.78)	(-34.65 , -0.78)
19	10	(0.00 , -69.38)	(-93.70 , -18.90)	(-93.70 , 18.90)
19	11	(0.00 , 3.93)	(-3.13 , -10.19)	(-3.13 , 10.19)
19	12	(0.00 , 17.59)	(34.85 , 32.99)	(34.85 , -32.99)

19	13	(0.00 , 110.58)	(112.56 , -5.88)	(112.56 , 5.88)
19	14	(0.00 , 197.94)	(225.60 , 42.14)	(225.60 , -42.14)
19	15	(0.00 , 17.56)	(25.05 , -10.33)	(25.05 , 10.33)
19	16	(0.00 , -76.24)	(-96.10 , -15.69)	(-96.10 , 15.69)
19	17	(0.00 , -34.60)	(-20.47 , -10.86)	(-20.47 , 10.86)
19	18	(0.00 , 92.97)	(20.39 , 8.58)	(20.39 , -8.58)
19	19	(0.00 , -68.16)	(-121.17 , -21.70)	(-121.17 , 21.70)
19	20	(0.00 , -1.07)	(206.40 , 12.08)	(206.40 , -12.08)
20	0	(0.00 , 132.38)	(-96.74 , 386.53)	(-96.74 , -386.53)
20	1	(0.00 , 6.13)	(22.35 , -34.13)	(22.35 , 34.13)
20	2	(0.00 , -23.46)	(-27.25 , -74.17)	(-27.25 , 74.17)
20	3	(0.00 , -63.19)	(22.70 , 11.39)	(22.70 , -11.39)
20	4	(0.00 , -17.72)	(-2.68 , 4.32)	(-2.68 , -4.32)
20	5	(0.00 , -34.63)	(0.89 , 5.47)	(0.89 , -5.47)
20	6	(0.00 , 20.47)	(10.76 , 1.44)	(10.76 , -1.44)
20	7	(0.00 , 100.38)	(112.19 , -20.59)	(112.19 , 20.59)
20	8	(0.00 , 63.56)	(30.94 , 9.46)	(30.94 , -9.46)
20	9	(0.00 , 11.80)	(4.21 , -7.40)	(4.21 , 7.40)
20	10	(0.00 , 12.30)	(9.34 , 0.17)	(9.34 , -0.17)
20	11	(0.00 , 5.09)	(-2.88 , 3.60)	(-2.88 , -3.60)
20	12	(0.00 , -27.51)	(-18.86 , -12.79)	(-18.86 , 12.79)
20	13	(0.00 , -6.68)	(-7.58 , 10.23)	(-7.58 , -10.23)
20	14	(0.00 , -0.98)	(-27.27 , -12.29)	(-27.27 , 12.29)
20	15	(0.00 , 12.79)	(-3.00 , -0.12)	(-3.00 , 0.12)
20	16	(0.00 , 0.14)	(19.05 , 5.74)	(19.05 , -5.74)
20	17	(0.00 , -20.56)	(-5.45 , -5.89)	(-5.45 , 5.89)
20	18	(0.00 , 18.83)	(10.11 , 12.91)	(10.11 , -12.91)
20	19	(0.00 , -4.04)	(11.52 , -12.06)	(11.52 , 12.06)
20	20	(0.00 , -4.01)	(-17.32 , -0.58)	(-17.32 , 0.58)

Energies of the excited states in TD-DFT calculations considering SOC

The excited energies were extracted from the result of TD-DFT calculations considering SOC by Multiwfn, and the corresponded keywords of the calculations were listed as followed:

```
! PBE0 ZORA ZORA-def2-SVP SARC/J RI-SOMF(1X) TightSCF NoAutoStart MiniPrint NoPop
%maxcore 4000
%pal nprocs 8 end
%tddft nroots 20
    dosoc true
    tda false
    printlevel 3
end
%basis NEWGTO Pt "SARC-ZORA-SVP" end
end
```

The results of excited energies were summarized as followed:

Pt-A'_Singlet

State:	1	Exc. Energy:	3.293 eV	Multi.: 1	MO pairs:	2
State:	2	Exc. Energy:	3.482 eV	Multi.: 1	MO pairs:	5
State:	3	Exc. Energy:	3.498 eV	Multi.: 1	MO pairs:	5
State:	4	Exc. Energy:	3.682 eV	Multi.: 1	MO pairs:	5
State:	5	Exc. Energy:	3.789 eV	Multi.: 1	MO pairs:	4
State:	6	Exc. Energy:	3.834 eV	Multi.: 1	MO pairs:	3
State:	7	Exc. Energy:	3.929 eV	Multi.: 1	MO pairs:	5
State:	8	Exc. Energy:	3.968 eV	Multi.: 1	MO pairs:	5
State:	9	Exc. Energy:	4.013 eV	Multi.: 1	MO pairs:	8
State:	10	Exc. Energy:	4.099 eV	Multi.: 1	MO pairs:	9
State:	11	Exc. Energy:	4.112 eV	Multi.: 1	MO pairs:	9
State:	12	Exc. Energy:	4.151 eV	Multi.: 1	MO pairs:	4
State:	13	Exc. Energy:	4.213 eV	Multi.: 1	MO pairs:	10
State:	14	Exc. Energy:	4.307 eV	Multi.: 1	MO pairs:	5
State:	15	Exc. Energy:	4.322 eV	Multi.: 1	MO pairs:	7
State:	16	Exc. Energy:	4.333 eV	Multi.: 1	MO pairs:	12
State:	17	Exc. Energy:	4.342 eV	Multi.: 1	MO pairs:	10
State:	18	Exc. Energy:	4.393 eV	Multi.: 1	MO pairs:	7
State:	19	Exc. Energy:	4.441 eV	Multi.: 1	MO pairs:	10
State:	20	Exc. Energy:	4.450 eV	Multi.: 1	MO pairs:	11

Pt-A'_Triplet

State:	1	Exc. Energy:	2.764 eV	Multi.: 3	MO pairs:	14
State:	2	Exc. Energy:	2.820 eV	Multi.: 3	MO pairs:	15
State:	3	Exc. Energy:	2.835 eV	Multi.: 3	MO pairs:	23
State:	4	Exc. Energy:	3.229 eV	Multi.: 3	MO pairs:	3
State:	5	Exc. Energy:	3.376 eV	Multi.: 3	MO pairs:	6
State:	6	Exc. Energy:	3.470 eV	Multi.: 3	MO pairs:	10
State:	7	Exc. Energy:	3.543 eV	Multi.: 3	MO pairs:	19
State:	8	Exc. Energy:	3.568 eV	Multi.: 3	MO pairs:	17
State:	9	Exc. Energy:	3.598 eV	Multi.: 3	MO pairs:	15
State:	10	Exc. Energy:	3.686 eV	Multi.: 3	MO pairs:	18
State:	11	Exc. Energy:	3.729 eV	Multi.: 3	MO pairs:	18
State:	12	Exc. Energy:	3.783 eV	Multi.: 3	MO pairs:	8
State:	13	Exc. Energy:	3.810 eV	Multi.: 3	MO pairs:	19
State:	14	Exc. Energy:	3.836 eV	Multi.: 3	MO pairs:	13
State:	15	Exc. Energy:	3.849 eV	Multi.: 3	MO pairs:	16
State:	16	Exc. Energy:	3.901 eV	Multi.: 3	MO pairs:	17
State:	17	Exc. Energy:	3.956 eV	Multi.: 3	MO pairs:	23
State:	18	Exc. Energy:	3.963 eV	Multi.: 3	MO pairs:	19
State:	19	Exc. Energy:	3.999 eV	Multi.: 3	MO pairs:	24
State:	20	Exc. Energy:	4.026 eV	Multi.: 3	MO pairs:	15

Pt-A_Singlet

State:	1	Exc. Energy:	2.889 eV	Multi.: 1	MO pairs:	2
State:	2	Exc. Energy:	3.145 eV	Multi.: 1	MO pairs:	3
State:	3	Exc. Energy:	3.182 eV	Multi.: 1	MO pairs:	2
State:	4	Exc. Energy:	3.364 eV	Multi.: 1	MO pairs:	4
State:	5	Exc. Energy:	3.499 eV	Multi.: 1	MO pairs:	4
State:	6	Exc. Energy:	3.600 eV	Multi.: 1	MO pairs:	6
State:	7	Exc. Energy:	3.612 eV	Multi.: 1	MO pairs:	5
State:	8	Exc. Energy:	3.750 eV	Multi.: 1	MO pairs:	7
State:	9	Exc. Energy:	3.796 eV	Multi.: 1	MO pairs:	8
State:	10	Exc. Energy:	3.828 eV	Multi.: 1	MO pairs:	3
State:	11	Exc. Energy:	3.868 eV	Multi.: 1	MO pairs:	3
State:	12	Exc. Energy:	3.913 eV	Multi.: 1	MO pairs:	7
State:	13	Exc. Energy:	3.955 eV	Multi.: 1	MO pairs:	6
State:	14	Exc. Energy:	3.987 eV	Multi.: 1	MO pairs:	5
State:	15	Exc. Energy:	4.029 eV	Multi.: 1	MO pairs:	6
State:	16	Exc. Energy:	4.081 eV	Multi.: 1	MO pairs:	6
State:	17	Exc. Energy:	4.084 eV	Multi.: 1	MO pairs:	6
State:	18	Exc. Energy:	4.197 eV	Multi.: 1	MO pairs:	11
State:	19	Exc. Energy:	4.203 eV	Multi.: 1	MO pairs:	6
State:	20	Exc. Energy:	4.298 eV	Multi.: 1	MO pairs:	4

Pt-A_Triplet

State:	1	Exc. Energy:	2.454 eV	Multi.: 3	MO pairs:	7
State:	2	Exc. Energy:	2.658 eV	Multi.: 3	MO pairs:	12
State:	3	Exc. Energy:	2.837 eV	Multi.: 3	MO pairs:	10
State:	4	Exc. Energy:	2.904 eV	Multi.: 3	MO pairs:	9
State:	5	Exc. Energy:	3.005 eV	Multi.: 3	MO pairs:	6
State:	6	Exc. Energy:	3.182 eV	Multi.: 3	MO pairs:	15
State:	7	Exc. Energy:	3.246 eV	Multi.: 3	MO pairs:	17
State:	8	Exc. Energy:	3.254 eV	Multi.: 3	MO pairs:	13
State:	9	Exc. Energy:	3.357 eV	Multi.: 3	MO pairs:	12
State:	10	Exc. Energy:	3.397 eV	Multi.: 3	MO pairs:	12
State:	11	Exc. Energy:	3.423 eV	Multi.: 3	MO pairs:	5
State:	12	Exc. Energy:	3.626 eV	Multi.: 3	MO pairs:	10
State:	13	Exc. Energy:	3.680 eV	Multi.: 3	MO pairs:	21
State:	14	Exc. Energy:	3.703 eV	Multi.: 3	MO pairs:	14
State:	15	Exc. Energy:	3.767 eV	Multi.: 3	MO pairs:	15
State:	16	Exc. Energy:	3.784 eV	Multi.: 3	MO pairs:	19
State:	17	Exc. Energy:	3.813 eV	Multi.: 3	MO pairs:	18
State:	18	Exc. Energy:	3.824 eV	Multi.: 3	MO pairs:	9
State:	19	Exc. Energy:	3.841 eV	Multi.: 3	MO pairs:	7
State:	20	Exc. Energy:	3.873 eV	Multi.: 3	MO pairs:	14

Pt-B_Singlet

State:	1	Exc. Energy:	2.773 eV	Multi.: 1	MO pairs:	2
State:	2	Exc. Energy:	2.995 eV	Multi.: 1	MO pairs:	3
State:	3	Exc. Energy:	3.038 eV	Multi.: 1	MO pairs:	4
State:	4	Exc. Energy:	3.172 eV	Multi.: 1	MO pairs:	4
State:	5	Exc. Energy:	3.290 eV	Multi.: 1	MO pairs:	4
State:	6	Exc. Energy:	3.427 eV	Multi.: 1	MO pairs:	6
State:	7	Exc. Energy:	3.448 eV	Multi.: 1	MO pairs:	14
State:	8	Exc. Energy:	3.493 eV	Multi.: 1	MO pairs:	11
State:	9	Exc. Energy:	3.539 eV	Multi.: 1	MO pairs:	1
State:	10	Exc. Energy:	3.614 eV	Multi.: 1	MO pairs:	9
State:	11	Exc. Energy:	3.675 eV	Multi.: 1	MO pairs:	6
State:	12	Exc. Energy:	3.796 eV	Multi.: 1	MO pairs:	9
State:	13	Exc. Energy:	3.825 eV	Multi.: 1	MO pairs:	9
State:	14	Exc. Energy:	3.846 eV	Multi.: 1	MO pairs:	9
State:	15	Exc. Energy:	3.861 eV	Multi.: 1	MO pairs:	12
State:	16	Exc. Energy:	3.866 eV	Multi.: 1	MO pairs:	3
State:	17	Exc. Energy:	3.902 eV	Multi.: 1	MO pairs:	8
State:	18	Exc. Energy:	3.951 eV	Multi.: 1	MO pairs:	10
State:	19	Exc. Energy:	4.085 eV	Multi.: 1	MO pairs:	8
State:	20	Exc. Energy:	4.129 eV	Multi.: 1	MO pairs:	4

Pt-B_Triplet

State:	1	Exc. Energy:	2.292 eV	Multi.: 3	MO pairs:	7
State:	2	Exc. Energy:	2.431 eV	Multi.: 3	MO pairs:	7
State:	3	Exc. Energy:	2.790 eV	Multi.: 3	MO pairs:	10
State:	4	Exc. Energy:	2.830 eV	Multi.: 3	MO pairs:	10
State:	5	Exc. Energy:	2.851 eV	Multi.: 3	MO pairs:	10
State:	6	Exc. Energy:	2.926 eV	Multi.: 3	MO pairs:	20
State:	7	Exc. Energy:	2.938 eV	Multi.: 3	MO pairs:	17
State:	8	Exc. Energy:	2.985 eV	Multi.: 3	MO pairs:	17
State:	9	Exc. Energy:	3.044 eV	Multi.: 3	MO pairs:	10
State:	10	Exc. Energy:	3.106 eV	Multi.: 3	MO pairs:	15
State:	11	Exc. Energy:	3.257 eV	Multi.: 3	MO pairs:	5
State:	12	Exc. Energy:	3.355 eV	Multi.: 3	MO pairs:	16
State:	13	Exc. Energy:	3.376 eV	Multi.: 3	MO pairs:	11
State:	14	Exc. Energy:	3.508 eV	Multi.: 3	MO pairs:	11
State:	15	Exc. Energy:	3.523 eV	Multi.: 3	MO pairs:	5
State:	16	Exc. Energy:	3.582 eV	Multi.: 3	MO pairs:	9
State:	17	Exc. Energy:	3.647 eV	Multi.: 3	MO pairs:	9
State:	18	Exc. Energy:	3.733 eV	Multi.: 3	MO pairs:	21
State:	19	Exc. Energy:	3.749 eV	Multi.: 3	MO pairs:	14
State:	20	Exc. Energy:	3.760 eV	Multi.: 3	MO pairs:	10

Pt-C'_Singlet

State:	1	Exc. Energy:	3.036 eV	Multi.: 1	MO pairs:	2
State:	2	Exc. Energy:	3.250 eV	Multi.: 1	MO pairs:	2
State:	3	Exc. Energy:	3.332 eV	Multi.: 1	MO pairs:	3
State:	4	Exc. Energy:	3.514 eV	Multi.: 1	MO pairs:	2
State:	5	Exc. Energy:	3.531 eV	Multi.: 1	MO pairs:	3
State:	6	Exc. Energy:	3.705 eV	Multi.: 1	MO pairs:	3
State:	7	Exc. Energy:	3.752 eV	Multi.: 1	MO pairs:	2
State:	8	Exc. Energy:	3.874 eV	Multi.: 1	MO pairs:	1
State:	9	Exc. Energy:	3.917 eV	Multi.: 1	MO pairs:	5
State:	10	Exc. Energy:	3.981 eV	Multi.: 1	MO pairs:	4
State:	11	Exc. Energy:	4.044 eV	Multi.: 1	MO pairs:	4
State:	12	Exc. Energy:	4.058 eV	Multi.: 1	MO pairs:	6
State:	13	Exc. Energy:	4.100 eV	Multi.: 1	MO pairs:	10
State:	14	Exc. Energy:	4.166 eV	Multi.: 1	MO pairs:	9
State:	15	Exc. Energy:	4.190 eV	Multi.: 1	MO pairs:	7
State:	16	Exc. Energy:	4.205 eV	Multi.: 1	MO pairs:	8
State:	17	Exc. Energy:	4.270 eV	Multi.: 1	MO pairs:	9
State:	18	Exc. Energy:	4.301 eV	Multi.: 1	MO pairs:	14
State:	19	Exc. Energy:	4.315 eV	Multi.: 1	MO pairs:	10
State:	20	Exc. Energy:	4.352 eV	Multi.: 1	MO pairs:	7

Pt-C'_Triplet

State:	1	Exc. Energy:	2.628 eV	Multi.: 3	MO pairs:	12
State:	2	Exc. Energy:	2.667 eV	Multi.: 3	MO pairs:	14
State:	3	Exc. Energy:	2.819 eV	Multi.: 3	MO pairs:	10
State:	4	Exc. Energy:	2.985 eV	Multi.: 3	MO pairs:	3
State:	5	Exc. Energy:	3.158 eV	Multi.: 3	MO pairs:	5
State:	6	Exc. Energy:	3.302 eV	Multi.: 3	MO pairs:	8
State:	7	Exc. Energy:	3.442 eV	Multi.: 3	MO pairs:	14
State:	8	Exc. Energy:	3.508 eV	Multi.: 3	MO pairs:	10
State:	9	Exc. Energy:	3.523 eV	Multi.: 3	MO pairs:	11
State:	10	Exc. Energy:	3.566 eV	Multi.: 3	MO pairs:	19
State:	11	Exc. Energy:	3.583 eV	Multi.: 3	MO pairs:	18
State:	12	Exc. Energy:	3.600 eV	Multi.: 3	MO pairs:	8
State:	13	Exc. Energy:	3.614 eV	Multi.: 3	MO pairs:	16
State:	14	Exc. Energy:	3.700 eV	Multi.: 3	MO pairs:	19
State:	15	Exc. Energy:	3.772 eV	Multi.: 3	MO pairs:	11
State:	16	Exc. Energy:	3.815 eV	Multi.: 3	MO pairs:	11
State:	17	Exc. Energy:	3.866 eV	Multi.: 3	MO pairs:	20
State:	18	Exc. Energy:	3.900 eV	Multi.: 3	MO pairs:	23
State:	19	Exc. Energy:	3.907 eV	Multi.: 3	MO pairs:	13
State:	20	Exc. Energy:	3.959 eV	Multi.: 3	MO pairs:	16

Pt-C_Singlet

State:	1	Exc. Energy:	2.798 eV	Multi.: 1	MO pairs:	1
State:	2	Exc. Energy:	3.039 eV	Multi.: 1	MO pairs:	3
State:	3	Exc. Energy:	3.066 eV	Multi.: 1	MO pairs:	4
State:	4	Exc. Energy:	3.226 eV	Multi.: 1	MO pairs:	3
State:	5	Exc. Energy:	3.360 eV	Multi.: 1	MO pairs:	4
State:	6	Exc. Energy:	3.487 eV	Multi.: 1	MO pairs:	3
State:	7	Exc. Energy:	3.602 eV	Multi.: 1	MO pairs:	6
State:	8	Exc. Energy:	3.624 eV	Multi.: 1	MO pairs:	2
State:	9	Exc. Energy:	3.688 eV	Multi.: 1	MO pairs:	5
State:	10	Exc. Energy:	3.796 eV	Multi.: 1	MO pairs:	9
State:	11	Exc. Energy:	3.811 eV	Multi.: 1	MO pairs:	6
State:	12	Exc. Energy:	3.857 eV	Multi.: 1	MO pairs:	6
State:	13	Exc. Energy:	3.862 eV	Multi.: 1	MO pairs:	7
State:	14	Exc. Energy:	3.921 eV	Multi.: 1	MO pairs:	6
State:	15	Exc. Energy:	3.949 eV	Multi.: 1	MO pairs:	2
State:	16	Exc. Energy:	3.987 eV	Multi.: 1	MO pairs:	6
State:	17	Exc. Energy:	4.098 eV	Multi.: 1	MO pairs:	3
State:	18	Exc. Energy:	4.138 eV	Multi.: 1	MO pairs:	6
State:	19	Exc. Energy:	4.173 eV	Multi.: 1	MO pairs:	2
State:	20	Exc. Energy:	4.224 eV	Multi.: 1	MO pairs:	5

Pt-C_Triplet

State:	1	Exc. Energy:	2.344 eV	Multi.: 3	MO pairs:	5
State:	2	Exc. Energy:	2.504 eV	Multi.: 3	MO pairs:	7
State:	3	Exc. Energy:	2.825 eV	Multi.: 3	MO pairs:	9
State:	4	Exc. Energy:	2.829 eV	Multi.: 3	MO pairs:	12
State:	5	Exc. Energy:	2.900 eV	Multi.: 3	MO pairs:	7
State:	6	Exc. Energy:	3.031 eV	Multi.: 3	MO pairs:	10
State:	7	Exc. Energy:	3.107 eV	Multi.: 3	MO pairs:	11
State:	8	Exc. Energy:	3.146 eV	Multi.: 3	MO pairs:	15
State:	9	Exc. Energy:	3.288 eV	Multi.: 3	MO pairs:	4
State:	10	Exc. Energy:	3.355 eV	Multi.: 3	MO pairs:	12
State:	11	Exc. Energy:	3.362 eV	Multi.: 3	MO pairs:	11
State:	12	Exc. Energy:	3.563 eV	Multi.: 3	MO pairs:	8
State:	13	Exc. Energy:	3.589 eV	Multi.: 3	MO pairs:	7
State:	14	Exc. Energy:	3.606 eV	Multi.: 3	MO pairs:	4
State:	15	Exc. Energy:	3.667 eV	Multi.: 3	MO pairs:	15
State:	16	Exc. Energy:	3.747 eV	Multi.: 3	MO pairs:	17
State:	17	Exc. Energy:	3.756 eV	Multi.: 3	MO pairs:	13
State:	18	Exc. Energy:	3.773 eV	Multi.: 3	MO pairs:	7
State:	19	Exc. Energy:	3.807 eV	Multi.: 3	MO pairs:	20
State:	20	Exc. Energy:	3.811 eV	Multi.: 3	MO pairs:	15

Details of the SOC heatmap drawing

Firstly, the SOC matrix elements (SOCME) listed above were processed by the method provided in *PCCP*, 2014, **16**, 26184-26192.

Pt-A

T	S	MS= 0	-1	+1
1	0	(0.00 , -39.35)	(-25.70 , 45.05)	(-25.70 , -45.05)
1	1	(0.00 , 102.50)	(-51.16 , -19.19)	(-51.16 , 19.19)
1	2	(0.00 , 199.69)	(441.41 , 126.83)	(441.41 , -126.83)

….

Take **Pt-A** as example, the SOCME in the first three rows could be proceed as followed:

$\langle T1|HSO|S0\rangle = \sqrt{(0.00)^2+(-39.35)^2+(-25.70)^2+(45.05)^2+(-25.70)^2+(-45.05)^2} = 83.2\ cm^{-1}$

$\langle T1|HSO|S1\rangle = \sqrt{(0.00)^2+(102.50)^2+(-51.16)^2+(-19.19)^2+(-51.16)^2+(19.19)^2} = 128.4\ cm^{-1}$

$\langle T1|HSO|S2\rangle = \sqrt{(0.00)^2+(199.69)^2+(441.41)^2+(126.83)^2+(441.41)^2+(-126.83)^2} = 679.5\ cm^{-1}$

After the above processing, the SOCME could be summarized as Table S2 (some values were omitted for simplification):

Table S2.

S|T	1	2	3	4	…	17	18	19	20
0	83.2	233.4	14.3	273.6	…	219.2	202.9	91.0	266.5
1	128.4	460.1	16.4	1130.8	…	110.1	661.5	355.9	1143.0
2	679.5	229.8	9.9	344.4	…	176.6	319.6	161.5	463.6
3	1701.8	823.7	58.8	1720.7	…	244.6	386.8	208.9	590.3
4	401.4	182.4	49.2	511.0	…	362.0	239.7	101.2	306.7
5	126.2	773.0	82.8	846.0	…	759.7	198.2	221.2	421.1
…	…	…	…	…	…	…	…	…	…
15	681.2	145.1	36.3	464.1	…	63.0	108.6	165.5	91.9
16	589.8	139.5	12.8	293.7	…	76.3	143.6	182.8	59.3
17	351.3	99.2	14.3	159.1	…	67.6	131.2	100.5	47.1
18	80.1	177.3	18.4	369.2	…	155.8	337.9	249.0	451.7
19	79.4	33.6	7.1	65.4	…	50.4	96.0	157.2	132.4
20	10.4	14.8	9.0	39.6	…	20.8	98.0	172.3	99.8

Secondly, the excited energies listed above were applied to calculated the values of Sn-Tn.

Pt-A_Singlet

State:	1	Exc. Energy:	2.889 eV	Multi.: 1	MO pairs:	2
State:	2	Exc. Energy:	3.145 eV	Multi.: 1	MO pairs:	3
State:	3	Exc. Energy:	3.182 eV	Multi.: 1	MO pairs:	2
State:	4	Exc. Energy:	3.364 eV	Multi.: 1	MO pairs:	4
State:	5	Exc. Energy:	3.499 eV	Multi.: 1	MO pairs:	4

…

Pt-A_Triplet

State:	1	Exc. Energy:	2.454 eV	Multi.: 3	MO pairs:	7
State:	2	Exc. Energy:	2.658 eV	Multi.: 3	MO pairs:	12
State:	3	Exc. Energy:	2.837 eV	Multi.: 3	MO pairs:	10
State:	4	Exc. Energy:	2.904 eV	Multi.: 3	MO pairs:	9
State:	5	Exc. Energy:	3.005 eV	Multi.: 3	MO pairs:	6

…

Take **Pt-A** as example, the values of Sn-Tn could be proceed as followed:

S1-T1=2.889-2.454 = eV; S1-T2=2.889-2.658 = eV; ⋯

S2-T1=2.889-2.658 = eV; ⋯

…

And the results of the sign of Sn-Tn were summarized as Table S3 (some values were omitted for simplification):

Table S3.

S|T	1	2	3	4	⋯	17	18	19	20
0	1	1	1	1	⋯	1	1	1	1
1	-1	-1	-1	1	⋯	1	1	1	1
2	-1	-1	-1	-1	⋯	1	1	1	1
3	-1	-1	-1	-1	⋯	1	1	1	1
4	-1	-1	-1	-1	⋯	1	1	1	1
5	-1	-1	-1	-1	⋯	1	1	1	1
…	…	…	…	…	…	…	…	…	…
15	-1	-1	-1	-1	⋯	-1	-1	-1	-1
16	-1	-1	-1	-1	⋯	-1	-1	-1	-1
17	-1	-1	-1	-1	⋯	-1	-1	-1	-1
18	-1	-1	-1	-1	⋯	-1	-1	-1	-1
19	-1	-1	-1	-1	⋯	-1	-1	-1	-1
20	-1	-1	-1	-1	⋯	-1	-1	-1	-1

Thirdly, multiple the values in Table S2 and those in Table S3, then we get Table S4:

Table S4.

S|T	1	2	3	4	···	17	18	19	20
0	83.2	233.4	14.3	273.6	···	219.2	202.9	91.0	266.5
1	-128.4	-460.1	-16.4	1130.8	···	110.1	661.5	355.9	1143.0
2	-679.5	-229.8	-9.9	-344.4	···	176.6	319.6	161.5	463.6
3	-1701.8	-823.7	-58.8	-1720.7	···	244.6	386.8	208.9	590.3
4	-401.4	-182.4	-49.2	-511.0	···	362.0	239.7	101.2	306.7
5	-126.2	-773.0	-82.8	-846.0	···	759.7	198.2	221.2	421.1
…	…	…	…	…	…	…	…	…	…
15	-681.2	-145.1	-36.3	-464.1	···	-63.0	-108.6	-165.5	-91.9
16	-589.8	-139.5	-12.8	-293.7	···	-76.3	-143.6	-182.8	-59.3
17	-351.3	-99.2	-14.3	-159.1	···	-67.6	-131.2	-100.5	-47.1
18	-80.1	-177.3	-18.4	-369.2	···	-155.8	-337.9	-249.0	-451.7
19	-79.4	-33.6	-7.1	-65.4	···	-50.4	-96.0	-157.2	-132.4
20	-10.4	-14.8	-9.0	-39.6	···	-20.8	-98.0	-172.3	-99.8

Finally, Table S4 were applied for heatmap drawing, using BWR coloring method. The negative values represented for Sn-Tn<0, namely, Tn were in higher energy levels. Based on the thermodynamic equilibrium, triplets should be transformed into singlets, and it was a reverse intersystem crossing (RISC) process in these situation. On the contrary, it was treated as ISC when Sn-Tn>0.

Energies of the Pt(II)/Pt(IV) species

Energies were extracted from the output files of geometry optimization calculations by Shermo, and the corresponded keywords of the optimization calculations were listed as followed:

! PBE0 D3 def2-SVP def2/J RIJCOSX OPT FREQ TightSCF NoAutoStart MiniPrint NoPop
%maxcore 1000
%pal nprocs 8 end

The energies were summarized as followed:

Pt-A

Total q(V=0): 1.100715E+056
Total q(bot): 6.968664E-265
Total q(V=0)/NA: 1.827779E+032
Total q(bot)/NA: 1.157174E-288
Total CV: 660.255 J/mol/K 157.805 cal/mol/K
Total CP: 668.570 J/mol/K 159.792 cal/mol/K
Total S: 964.960 J/mol/K 230.631 cal/mol/K -TS: -68.763 kcal/mol
Zero point energy (ZPE): 1827.698 kJ/mol 436.830 kcal/mol 0.696133 a.u.
Thermal correction to U: 1928.771 kJ/mol 460.987 kcal/mol 0.734630 a.u.
Thermal correction to H: 1931.250 kJ/mol 461.580 kcal/mol 0.735574 a.u.
Thermal correction to G: 1643.547 kJ/mol 392.817 kcal/mol 0.625994 a.u.
Electronic energy: -1887.2335381 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -1886.5374046 a.u.
Sum of electronic energy and thermal correction to U: -1886.4989082 a.u.
Sum of electronic energy and thermal correction to H: -1886.4979640 a.u.
Sum of electronic energy and thermal correction to G: -1886.6075442 a.u.

Pt-A'

Total q(V=0): 1.078499E+057
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 1.790889E+033
Total q(bot)/NA: 0.000000E+000
Total CV: 715.143 J/mol/K 170.923 cal/mol/K
Total CP: 723.458 J/mol/K 172.911 cal/mol/K
Total S: 1013.686 J/mol/K 242.277 cal/mol/K -TS: -72.235 kcal/mol
Zero point energy (ZPE): 1904.174 kJ/mol 455.109 kcal/mol 0.725262 a.u.
Thermal correction to U: 2014.117 kJ/mol 481.385 kcal/mol 0.767137 a.u.
Thermal correction to H: 2016.596 kJ/mol 481.978 kcal/mol 0.768081 a.u.
Thermal correction to G: 1714.365 kJ/mol 409.743 kcal/mol 0.652967 a.u.
Electronic energy: -2038.5763293 a.u.

Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2037.8510677 a.u.
Sum of electronic energy and thermal correction to U: -2037.8091928 a.u.
Sum of electronic energy and thermal correction to H: -2037.8082486 a.u.
Sum of electronic energy and thermal correction to G: -2037.9233620 a.u.

Pt-B

Total q(V=0): 6.098490E+058
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 1.012678E+035
Total q(bot)/NA: 0.000000E+000
Total CV: 716.145 J/mol/K 171.163 cal/mol/K
Total CP: 724.459 J/mol/K 173.150 cal/mol/K
Total S: 1054.533 J/mol/K 252.040 cal/mol/K -TS: -75.146 kcal/mol
Zero point energy (ZPE): 1876.939 kJ/mol 448.599 kcal/mol 0.714888 a.u.
Thermal correction to U: 1989.057 kJ/mol 475.396 kcal/mol 0.757592 a.u.
Thermal correction to H: 1991.536 kJ/mol 475.989 kcal/mol 0.758536 a.u.
Thermal correction to G: 1677.127 kJ/mol 400.843 kcal/mol 0.638784 a.u.
Electronic energy: -2113.4824037 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2112.7675156 a.u.
Sum of electronic energy and thermal correction to U: -2112.7248119 a.u.
Sum of electronic energy and thermal correction to H: -2112.7238677 a.u.
Sum of electronic energy and thermal correction to G: -2112.8436198 a.u.

Pt-C

Total q(V=0): 1.047876E+060
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 1.740038E+036
Total q(bot)/NA: 0.000000E+000
Total CV: 743.755 J/mol/K 177.762 cal/mol/K
Total CP: 752.069 J/mol/K 179.749 cal/mol/K
Total S: 1093.270 J/mol/K 261.298 cal/mol/K -TS: -77.906 kcal/mol
Zero point energy (ZPE): 1908.731 kJ/mol 456.198 kcal/mol 0.726997 a.u.
Thermal correction to U: 2025.349 kJ/mol 484.070 kcal/mol 0.771415 a.u.
Thermal correction to H: 2027.828 kJ/mol 484.663 kcal/mol 0.772359 a.u.
Thermal correction to G: 1701.870 kJ/mol 406.757 kcal/mol 0.648208 a.u.
Electronic energy: -2263.7359545 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2263.0089572 a.u.
Sum of electronic energy and thermal correction to U: -2262.9645398 a.u.
Sum of electronic energy and thermal correction to H: -2262.9635956 a.u.
Sum of electronic energy and thermal correction to G: -2263.0877466 a.u.

Pt-C'

Total q(V=0): 1.176850E+061
Total q(bot): 0.000000E+000

Total q(V=0)/NA: 1.954205E+037
Total q(bot)/NA: 0.000000E+000
Total CV: 798.949 J/mol/K 190.953 cal/mol/K
Total CP: 807.263 J/mol/K 192.941 cal/mol/K
Total S: 1143.726 J/mol/K 273.357 cal/mol/K -TS: -81.501 kcal/mol
Zero point energy (ZPE): 1985.063 kJ/mol 474.441 kcal/mol 0.756071 a.u.
Thermal correction to U: 2110.729 kJ/mol 504.476 kcal/mol 0.803934 a.u.
Thermal correction to H: 2113.208 kJ/mol 505.069 kcal/mol 0.804878 a.u.
Thermal correction to G: 1772.206 kJ/mol 423.567 kcal/mol 0.674997 a.u.
Electronic energy: -2415.0776657 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2414.3215952 a.u.
Sum of electronic energy and thermal correction to U: -2414.2737316 a.u.
Sum of electronic energy and thermal correction to H: -2414.2727875 a.u.
Sum of electronic energy and thermal correction to G: -2414.4026682 a.u.

Pt-A_triplet

Total q(V=0): 5.758630E+056
Total q(bot): 1.884320E-262
Total q(V=0)/NA: 9.562428E+032
Total q(bot)/NA: 3.128987E-286
Total CV: 667.811 J/mol/K 159.611 cal/mol/K
Total CP: 676.126 J/mol/K 161.598 cal/mol/K
Total S: 983.154 J/mol/K 234.979 cal/mol/K -TS: -70.059 kcal/mol
Zero point energy (ZPE): 1817.919 kJ/mol 434.493 kcal/mol 0.692409 a.u.
Thermal correction to U: 1920.314 kJ/mol 458.966 kcal/mol 0.731409 a.u.
Thermal correction to H: 1922.793 kJ/mol 459.558 kcal/mol 0.732353 a.u.
Thermal correction to G: 1629.665 kJ/mol 389.499 kcal/mol 0.620707 a.u.
Electronic energy: -1887.1409867 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -1886.4485781 a.u.
Sum of electronic energy and thermal correction to U: -1886.4095779 a.u.
Sum of electronic energy and thermal correction to H: -1886.4086338 a.u.
Sum of electronic energy and thermal correction to G: -1886.5202801 a.u.

Pt-A'_triplet

Total q(V=0): 6.421631E+057
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 1.066337E+034
Total q(bot)/NA: 0.000000E+000
Total CV: 725.399 J/mol/K 173.374 cal/mol/K
Total CP: 733.713 J/mol/K 175.362 cal/mol/K
Total S: 1034.172 J/mol/K 247.173 cal/mol/K -TS: -73.695 kcal/mol
Zero point energy (ZPE): 1891.685 kJ/mol 452.124 kcal/mol 0.720505 a.u.
Thermal correction to U: 2003.313 kJ/mol 478.803 kcal/mol 0.763022 a.u.

Thermal correction to H: 2005.792 kJ/mol 479.396 kcal/mol 0.763966 a.u.
Thermal correction to G: 1697.454 kJ/mol 405.701 kcal/mol 0.646526 a.u.
Electronic energy: -2038.4755505 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2037.7550457 a.u.
Sum of electronic energy and thermal correction to U: -2037.7125289 a.u.
Sum of electronic energy and thermal correction to H: -2037.7115847 a.u.
Sum of electronic energy and thermal correction to G: -2037.8290246 a.u.

Pt-B_triplet

Total q(V=0): 2.906995E+059
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 4.827177E+035
Total q(bot)/NA: 0.000000E+000
Total CV: 722.120 J/mol/K 172.591 cal/mol/K
Total CP: 730.434 J/mol/K 174.578 cal/mol/K
Total S: 1071.128 J/mol/K 256.006 cal/mol/K -TS: -76.328 kcal/mol
Zero point energy (ZPE): 1868.702 kJ/mol 446.630 kcal/mol 0.711751 a.u.
Thermal correction to U: 1981.897 kJ/mol 473.685 kcal/mol 0.754865 a.u.
Thermal correction to H: 1984.376 kJ/mol 474.277 kcal/mol 0.755809 a.u.
Thermal correction to G: 1665.019 kJ/mol 397.949 kcal/mol 0.634172 a.u.
Electronic energy: -2113.3970564 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2112.6853056 a.u.
Sum of electronic energy and thermal correction to U: -2112.6421918 a.u.
Sum of electronic energy and thermal correction to H: -2112.6412477 a.u.
Sum of electronic energy and thermal correction to G: -2112.7628843 a.u.

Pt-C_triplet

Total q(V=0): 4.034378E+060
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 6.699240E+036
Total q(bot)/NA: 0.000000E+000
Total CV: 750.304 J/mol/K 179.327 cal/mol/K
Total CP: 758.618 J/mol/K 181.314 cal/mol/K
Total S: 1108.285 J/mol/K 264.886 cal/mol/K -TS: -78.976 kcal/mol
Zero point energy (ZPE): 1900.238 kJ/mol 454.168 kcal/mol 0.723762 a.u.
Thermal correction to U: 2017.991 kJ/mol 482.311 kcal/mol 0.768612 a.u.
Thermal correction to H: 2020.470 kJ/mol 482.904 kcal/mol 0.769556 a.u.
Thermal correction to G: 1690.035 kJ/mol 403.928 kcal/mol 0.643700 a.u.
Electronic energy: -2263.6489747 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2262.9252123 a.u.
Sum of electronic energy and thermal correction to U: -2262.8803626 a.u.
Sum of electronic energy and thermal correction to H: -2262.8794184 a.u.
Sum of electronic energy and thermal correction to G: -2263.0052745 a.u.

Pt-C'_triplet

Total q(V=0): 6.424552E+061
Total q(bot): 0.000000E+000
Total q(V=0)/NA: 1.066822E+038
Total q(bot)/NA: 0.000000E+000
Total CV: 807.677 J/mol/K 193.039 cal/mol/K
Total CP: 815.991 J/mol/K 195.027 cal/mol/K
Total S: 1162.882 J/mol/K 277.935 cal/mol/K -TS: -82.866 kcal/mol
Zero point energy (ZPE): 1974.012 kJ/mol 471.800 kcal/mol 0.751861 a.u.
Thermal correction to U: 2101.181 kJ/mol 502.194 kcal/mol 0.800297 a.u.
Thermal correction to H: 2103.660 kJ/mol 502.787 kcal/mol 0.801242 a.u.
Thermal correction to G: 1756.947 kJ/mol 419.920 kcal/mol 0.669186 a.u.
Electronic energy: -2414.9824371 a.u.
Sum of electronic energy and ZPE, namely U/H/G at 0 K: -2414.2305759 a.u.
Sum of electronic energy and thermal correction to U: -2414.1821396 a.u.
Sum of electronic energy and thermal correction to H: -2414.1811954 a.u.
Sum of electronic energy and thermal correction to G: -2414.3132515 a.u.

Results of the frequency analysis

Frequencies were extracted from the output files of geometry optimization calculations by Shermo, and the corresponded keywords of the optimization calculations were listed as followed:

! PBE0 D3 def2-SVP def2/J RIJCOSX OPT FREQ TightSCF NoAutoStart MiniPrint NoPop
%maxcore 1000
%pal nprocs 8 end

Frequency results were summarized as followed:

Pt-A

There are 246 frequencies (cm^-1):

19.5	25.6	26.2	28.7	37.0	42.7	45.5	57.7	69.9
74.9	86.3	90.1	99.5	123.1	134.6	141.1	169.0	176.8
182.1	198.9	200.4	209.3	216.4	237.3	243.2	245.8	249.0
256.2	274.1	280.2	283.1	288.7	290.9	309.0	312.0	320.6
331.1	332.8	338.4	341.3	344.6	349.6	351.9	363.1	372.4
398.6	401.9	407.7	436.6	450.9	455.9	456.6	459.6	464.4
477.8	490.8	497.8	500.1	511.5	521.0	530.1	539.7	541.6
569.1	607.7	611.2	634.3	646.1	649.1	655.5	673.3	676.7
677.7	681.0	698.2	710.6	733.3	740.3	744.0	751.3	761.9
765.9	774.6	780.2	783.9	800.0	807.2	823.8	825.0	841.3
850.9	852.4	865.5	880.0	887.0	892.8	899.4	924.1	925.6
937.1	941.9	942.9	949.8	950.8	950.9	953.7	956.6	969.1
974.5	983.4	984.9	992.5	998.6	1000.9	1015.2	1019.3	1020.6
1021.8	1032.1	1035.7	1038.8	1039.4	1040.6	1052.0	1053.1	1058.1
1064.2	1067.6	1080.6	1110.2	1110.5	1125.8	1129.6	1131.6	1136.0
1147.0	1151.9	1160.4	1162.7	1171.4	1175.7	1185.4	1190.9	1193.0
1227.4	1229.3	1238.8	1240.4	1241.3	1244.8	1261.0	1263.0	1270.2
1283.2	1285.9	1311.4	1314.8	1339.9	1345.4	1348.7	1354.8	1359.2
1377.1	1378.8	1379.1	1379.6	1381.4	1382.4	1389.4	1406.7	1408.0
1412.1	1436.4	1448.6	1448.8	1449.0	1452.9	1456.1	1456.6	1456.8
1472.7	1474.0	1475.2	1476.9	1477.1	1477.5	1481.3	1482.9	1492.4
1492.9	1493.6	1499.4	1515.2	1518.8	1522.4	1557.2	1628.8	1631.7
1651.6	1655.8	1660.8	1663.3	1669.6	1672.3	1672.9	1677.4	1698.7
1700.5	3047.7	3048.0	3050.2	3051.0	3052.9	3055.9	3130.3	3142.7
3143.6	3144.3	3145.2	3145.3	3148.2	3149.2	3150.2	3153.5	3154.4
3156.1	3156.4	3193.8	3195.1	3201.0	3203.2	3203.7	3205.4	3217.3
3217.5	3219.3	3220.3	3223.2	3226.0	3226.1	3234.4	3240.6	3247.9
3251.8	3269.9	3270.7						

Pt-A'

There are 258 frequencies (cm^-1):

19.4	26.2	28.5	30.5	47.0	48.4	49.7	63.1	69.7
72.6	86.8	88.7	98.8	106.4	132.2	143.9	147.6	155.7
169.7	181.2	185.7	193.1	199.7	215.0	223.8	230.1	238.2
243.2	244.6	247.3	256.1	264.5	268.5	280.8	283.4	287.1
289.0	297.6	304.2	307.2	314.9	331.0	334.3	336.6	339.5
346.2	347.3	351.0	353.1	364.0	373.2	397.7	401.1	411.4
443.5	451.1	456.4	456.8	465.0	470.4	483.5	490.0	496.6
505.4	518.9	522.1	533.1	541.2	543.2	553.7	570.0	584.5
606.4	612.0	625.8	645.2	650.8	656.9	678.8	680.4	681.6
684.9	702.6	712.1	732.7	741.4	750.8	755.9	765.5	768.9
776.0	781.5	786.8	797.6	809.1	824.6	826.4	840.5	851.5
853.8	867.1	878.9	890.2	893.1	904.1	926.4	928.6	936.1
942.8	943.1	949.9	951.1	956.2	960.8	971.2	977.0	980.8
984.8	986.2	987.1	997.5	998.8	1013.2	1015.8	1022.0	1024.2
1024.6	1030.8	1036.3	1039.3	1040.0	1047.5	1049.7	1055.1	1058.9
1064.5	1064.8	1070.1	1080.3	1116.7	1121.5	1130.7	1134.1	1135.5
1137.9	1147.0	1153.0	1161.0	1165.0	1173.0	1175.7	1187.9	1193.5
1194.6	1220.8	1228.4	1238.2	1240.7	1241.2	1248.5	1266.7	1267.9
1281.5	1284.5	1308.1	1313.8	1326.8	1337.2	1344.3	1349.7	1365.7
1369.7	1376.9	1377.1	1380.6	1382.2	1385.4	1387.9	1389.0	1407.0
1408.1	1414.2	1444.6	1448.8	1449.3	1453.0	1455.9	1457.4	1459.1
1463.5	1473.4	1475.5	1477.5	1480.0	1480.4	1482.2	1483.6	1487.6
1493.5	1498.9	1500.3	1505.8	1523.2	1525.0	1528.2	1560.1	1641.5
1643.5	1654.8	1661.1	1662.5	1670.5	1673.0	1676.4	1677.5	1683.8
1699.6	1703.2	3039.7	3045.2	3049.6	3049.7	3051.2	3056.3	3078.7
3135.1	3139.5	3143.0	3144.0	3144.6	3145.0	3150.0	3150.6	3151.4
3153.8	3155.4	3157.9	3199.8	3201.1	3201.9	3203.7	3208.0	3210.2
3218.0	3218.9	3219.3	3222.1	3226.2	3227.8	3228.3	3231.7	3235.8
3250.2	3251.5	3257.2	3267.4	3872.9	3875.7			

Pt-B

There are 258 frequencies (cm^-1):

15.3	19.0	23.1	27.1	33.2	35.5	43.1	52.0	54.2
64.0	70.6	73.3	81.6	87.5	117.0	122.0	131.9	140.3
143.1	154.2	173.3	182.7	186.3	197.8	200.8	206.7	215.1
232.3	238.3	243.1	244.1	256.0	259.6	269.6	280.4	286.9
289.2	297.4	305.2	308.6	319.6	321.9	331.6	332.3	337.3
339.5	343.6	349.4	356.1	359.8	373.2	378.5	396.5	401.5
437.2	450.8	455.7	456.3	461.9	464.0	479.4	490.2	497.1
501.4	505.4	523.2	540.0	541.1	544.2	558.1	568.1	569.1
609.1	612.5	633.8	650.6	667.1	671.6	676.0	679.1	686.2
692.5	701.3	726.4	733.1	739.1	757.0	764.6	765.0	773.3

775.1	790.9	795.5	817.5	820.7	824.0	829.9	852.7	856.8
868.4	869.1	880.8	889.0	898.4	920.3	925.0	928.6	930.7
937.8	942.0	943.2	949.6	950.4	950.9	952.8	953.8	955.7
978.3	983.2	986.0	993.4	997.2	1000.0	1001.8	1022.8	1023.5
1031.9	1035.5	1038.7	1039.3	1040.2	1040.3	1043.7	1052.1	1056.7
1058.8	1067.7	1109.3	1112.3	1124.9	1130.2	1131.1	1135.0	1146.6
1150.1	1161.8	1163.2	1185.4	1190.5	1192.5	1216.1	1224.7	1229.0
1239.0	1239.2	1240.6	1241.2	1244.9	1260.1	1272.6	1274.5	1284.8
1288.2	1310.9	1314.6	1339.7	1342.7	1347.4	1356.4	1360.2	1377.4
1378.0	1379.1	1379.8	1381.6	1383.2	1389.4	1406.6	1407.0	1408.2
1411.6	1415.9	1427.3	1437.3	1448.7	1449.4	1452.8	1455.5	1456.0
1456.3	1470.5	1473.3	1473.7	1476.5	1477.1	1477.4	1478.4	1486.0
1490.2	1492.6	1493.8	1497.7	1518.8	1521.0	1524.6	1557.0	1628.3
1634.0	1652.4	1655.6	1661.3	1663.1	1671.3	1673.5	1675.5	1677.2
1698.4	1700.1	1850.3	1851.0	2907.0	2927.9	3048.1	3048.8	3049.9
3051.1	3053.4	3055.8	3136.4	3143.6	3144.7	3144.7	3145.8	3146.0
3148.6	3149.2	3150.5	3152.8	3153.9	3156.0	3156.9	3196.8	3204.3
3204.4	3206.9	3209.9	3215.8	3219.7	3220.1	3220.3	3225.2	3231.2
3235.8	3249.8	3250.2	3252.5	3268.8	3270.4			

Pt-C

There are 264 frequencies (cm^-1):

14.0	18.2	24.9	28.2	32.2	36.4	37.7	50.5	51.0
55.6	56.2	63.9	71.2	73.1	84.8	87.4	108.3	130.4
138.0	150.4	151.6	159.8	181.3	182.6	198.2	200.2	201.3
215.9	222.8	239.8	243.2	244.8	251.2	262.6	275.8	280.9
284.4	287.5	291.3	299.0	305.3	314.3	319.4	331.1	332.1
337.5	340.1	345.7	346.6	356.5	372.3	377.4	378.9	401.3
433.1	450.8	454.9	455.9	456.9	462.7	473.6	478.6	489.8
492.7	496.1	498.2	508.2	518.5	526.8	531.5	541.3	552.8
566.2	569.1	603.8	609.8	616.4	624.1	638.4	652.0	656.1
661.0	676.0	679.0	687.9	689.1	696.7	706.4	731.5	733.2
746.5	752.4	754.8	768.1	772.6	780.5	786.4	799.2	800.5
814.4	823.5	837.8	844.3	851.7	860.0	861.0	864.9	873.3
874.6	880.6	894.9	926.8	928.9	937.7	942.1	943.1	945.8
949.6	950.7	951.2	954.0	956.5	972.5	983.7	985.4	988.7
993.1	997.8	999.7	1001.6	1022.1	1022.8	1032.1	1035.6	1038.8
1039.0	1040.6	1053.2	1058.1	1059.6	1068.7	1110.8	1112.9	1125.6
1130.5	1131.2	1135.1	1147.1	1151.6	1158.7	1162.6	1162.8	1167.4
1185.7	1191.4	1192.8	1206.9	1212.2	1228.4	1229.5	1239.1	1240.7
1240.8	1244.6	1260.4	1261.5	1271.5	1283.3	1285.4	1311.2	1314.1
1339.5	1342.4	1345.3	1355.3	1358.2	1377.5	1379.2	1379.9	1381.3
1381.4	1386.7	1389.1	1403.3	1406.9	1408.2	1411.7	1417.7	1420.8
1435.0	1448.5	1449.3	1452.4	1455.6	1456.0	1456.2	1469.5	1471.6

1473.4	1476.3	1477.0	1477.0	1477.9	1485.8	1492.3	1492.9	1493.4
1499.2	1520.5	1521.3	1525.6	1557.0	1628.7	1633.8	1652.0	1655.2
1660.9	1662.9	1672.2	1676.4	1676.9	1679.7	1698.2	1699.9	1869.4
1873.6	3047.8	3048.1	3050.0	3050.2	3053.0	3055.3	3128.5	3143.2
3144.1	3144.5	3145.1	3146.1	3149.0	3149.1	3149.9	3152.1	3154.2
3154.6	3155.8	3203.6	3205.8	3206.4	3209.0	3219.1	3219.5	3219.7
3226.3	3235.9	3237.8	3246.3	3249.6	3251.4	3252.4	3254.1	3268.9
3270.4	3820.2	3827.4						

Pt-C'

There are 276 frequencies (cm^-1):

14.1	20.3	24.8	29.7	34.4	40.2	44.8	49.8	52.4
58.9	59.8	63.8	68.9	72.0	85.8	88.2	107.7	110.4
127.0	142.6	148.2	155.8	164.4	170.1	184.1	185.5	194.4
198.8	205.5	207.0	220.7	228.3	236.1	241.0	245.9	252.5
252.8	270.9	272.8	275.6	280.7	282.4	288.6	292.7	299.5
306.9	311.5	314.0	320.5	333.5	338.9	339.5	344.1	349.1
351.6	357.1	373.2	378.1	384.2	401.2	439.4	451.0	456.0
456.4	460.5	469.6	473.4	482.6	489.6	492.1	495.8	502.5
512.4	521.5	530.2	534.0	541.1	552.6	555.1	567.1	570.0
584.8	598.0	612.3	618.5	623.1	634.2	653.0	656.4	661.4
678.8	682.6	690.6	691.1	701.2	707.6	730.7	734.1	748.9
755.3	757.0	768.5	773.4	781.1	790.5	798.1	802.0	814.7
825.1	837.4	847.3	851.8	862.8	863.1	867.9	876.2	877.8
880.6	895.4	929.1	931.6	936.7	940.4	942.8	943.4	949.7
950.8	956.3	960.8	974.9	978.6	985.6	986.4	987.7	993.9
998.2	999.4	1003.8	1013.2	1025.7	1026.3	1030.7	1036.2	1039.2
1040.0	1047.4	1048.8	1056.2	1061.6	1064.9	1069.7	1117.0	1119.2
1131.3	1134.3	1135.7	1138.2	1147.2	1154.6	1162.7	1165.0	1165.4
1167.8	1188.6	1192.9	1194.9	1206.8	1212.2	1220.3	1230.1	1238.0
1240.7	1241.8	1248.3	1263.7	1266.8	1282.1	1284.0	1307.9	1313.8
1327.1	1337.5	1342.8	1346.6	1366.6	1369.4	1377.0	1377.1	1380.8
1382.2	1388.7	1388.8	1393.6	1405.8	1407.0	1408.4	1414.2	1418.1
1431.4	1446.2	1449.0	1449.5	1453.0	1456.6	1458.2	1463.6	1472.6
1474.8	1477.7	1478.5	1479.6	1480.5	1483.1	1489.4	1494.2	1496.9
1499.0	1503.5	1527.5	1532.5	1535.0	1560.3	1637.7	1641.9	1654.9
1661.0	1662.9	1671.1	1677.9	1681.8	1682.2	1685.8	1699.6	1702.9
1871.6	1874.8	3040.7	3045.6	3049.9	3050.0	3051.5	3056.7	3081.1
3136.2	3140.1	3142.9	3144.6	3145.4	3145.8	3150.6	3150.8	3151.8
3153.8	3154.9	3157.4	3202.8	3204.5	3213.5	3216.2	3218.8	3220.9
3221.4	3227.9	3232.6	3239.2	3246.8	3247.1	3252.3	3253.2	3253.9
3259.3	3268.8	3819.2	3826.3	3874.5	3876.7			

Pt-A_triplet

There are 246 frequencies (cm^-1):

20.9	23.6	25.5	28.2	37.0	43.5	47.5	57.2	67.5
71.8	85.2	87.4	100.0	118.6	133.6	138.7	158.0	170.0
178.3	188.2	199.8	206.2	212.8	221.9	238.7	243.1	248.0
256.3	265.2	276.8	280.9	285.7	289.1	307.6	308.6	311.5
330.6	332.6	338.5	340.6	344.3	348.4	352.9	363.1	372.6
389.4	400.9	405.6	412.1	439.6	450.8	453.3	456.0	458.4
464.3	478.4	485.2	496.5	497.5	512.6	526.2	538.4	541.4
568.7	580.8	604.0	613.7	622.0	642.3	650.0	664.8	669.0
675.0	677.7	695.3	704.0	709.8	720.6	729.3	734.6	747.2
748.4	755.0	769.3	778.2	786.7	792.9	804.6	820.1	823.3
833.3	843.6	851.0	858.1	867.7	879.1	891.2	894.1	922.8
932.8	939.9	942.9	944.6	949.8	950.8	952.8	953.4	956.3
966.7	978.7	980.5	981.5	986.5	990.9	993.8	997.1	1003.5
1016.3	1018.1	1022.9	1032.4	1034.7	1035.8	1038.5	1039.4	1040.6
1050.7	1059.0	1071.1	1074.0	1106.0	1117.3	1124.7	1127.8	1131.0
1146.2	1152.0	1156.1	1162.4	1165.1	1172.4	1179.1	1184.4	1191.7
1194.7	1228.2	1234.0	1239.0	1240.5	1241.5	1244.6	1260.1	1265.5
1271.8	1284.4	1311.5	1314.4	1328.4	1340.4	1343.4	1354.0	1359.2
1363.1	1377.0	1378.8	1379.5	1380.8	1381.8	1389.6	1394.4	1406.6
1407.7	1412.0	1428.9	1448.8	1449.0	1453.0	1454.2	1455.4	1456.6
1456.8	1466.0	1472.4	1473.9	1476.7	1476.8	1477.3	1479.0	1481.8
1491.2	1493.2	1493.7	1500.7	1513.2	1520.9	1550.8	1556.3	1556.8
1594.5	1611.7	1624.5	1645.9	1656.4	1663.2	1668.0	1669.7	1698.7
1700.5	3048.1	3048.6	3050.0	3050.8	3053.4	3055.8	3143.1	3143.7
3143.9	3144.9	3146.1	3148.3	3149.2	3150.3	3153.5	3154.3	3154.4
3156.1	3167.1	3194.8	3200.8	3202.4	3202.6	3205.6	3216.4	3218.0
3218.4	3218.8	3220.7	3224.6	3225.2	3229.6	3234.7	3238.6	3241.1
3249.1	3270.1	3272.3						

Pt-A'_triplet

There are 258 frequencies (cm^-1):

19.6	25.8	28.8	30.0	46.4	48.0	50.0	62.3	64.0
72.1	86.0	87.6	96.2	105.1	122.8	136.6	147.0	154.3
156.2	177.6	185.1	189.3	199.3	214.9	216.0	223.8	234.3
241.4	242.7	246.2	254.1	258.4	265.7	277.3	280.4	283.6
286.4	292.6	301.7	305.7	311.6	320.1	332.4	335.4	339.1
342.3	346.6	347.4	350.6	363.4	373.0	391.4	400.9	410.0
420.5	447.5	451.1	456.0	456.5	461.4	469.8	483.9	493.1
496.6	504.7	517.0	519.8	540.6	540.8	548.1	562.7	572.2
583.1	593.0	611.8	619.7	635.8	649.8	652.0	660.5	672.1
679.5	681.0	684.5	693.8	706.7	722.1	736.7	751.1	754.1
758.5	772.0	780.1	783.8	793.1	801.6	807.5	818.1	820.0

826.5	846.6	851.7	865.0	878.2	886.7	894.6	898.0	927.3
937.3	942.8	942.9	943.2	949.9	951.3	956.0	960.6	975.3
977.4	981.9	982.7	986.1	986.3	987.3	996.4	998.1	1013.4
1016.5	1023.0	1024.1	1030.4	1034.3	1036.5	1039.3	1040.0	1047.0
1049.5	1056.5	1063.8	1065.6	1073.8	1113.0	1120.7	1122.6	1129.2
1133.8	1135.0	1143.8	1150.5	1153.6	1161.3	1165.0	1173.5	1186.1
1194.3	1204.8	1221.1	1233.8	1238.3	1240.9	1241.4	1248.6	1266.3
1275.3	1277.7	1300.6	1308.1	1314.2	1325.2	1337.8	1348.4	1365.8
1377.0	1377.2	1378.4	1380.8	1381.6	1382.3	1387.0	1389.3	1401.2
1407.1	1408.4	1412.0	1413.9	1443.8	1449.0	1449.4	1450.3	1453.1
1456.7	1457.9	1463.1	1473.3	1475.3	1477.6	1479.5	1479.8	1483.0
1484.9	1493.4	1498.1	1501.1	1512.6	1523.5	1526.6	1548.8	1555.4
1557.4	1606.9	1641.4	1653.4	1658.5	1665.5	1674.0	1679.7	1688.4
1699.0	1700.3	3040.6	3045.7	3049.9	3049.9	3051.4	3056.6	3076.4
3136.1	3140.0	3143.2	3144.2	3145.0	3145.2	3150.3	3150.7	3151.9
3153.9	3155.2	3158.2	3199.5	3202.5	3204.9	3205.7	3207.8	3218.1
3218.5	3219.2	3221.0	3222.0	3227.7	3228.5	3229.0	3231.8	3233.7
3250.9	3251.6	3264.9	3267.7	3868.0	3873.1			

Pt-B_triplet

There are 258 frequencies (cm^-1):

16.8	18.2	22.9	26.9	33.7	35.5	41.6	48.3	53.1
63.7	70.3	70.9	82.4	87.2	110.2	123.0	127.4	139.5
144.1	149.2	173.5	174.2	183.8	193.6	200.9	203.6	210.4
230.1	237.8	242.4	243.2	253.8	256.9	259.6	279.8	284.2
286.9	295.6	303.6	307.5	315.7	322.3	329.5	332.0	334.0
338.4	339.7	345.4	347.2	357.6	372.8	376.6	386.9	400.9
424.8	450.0	450.8	455.4	455.8	462.3	469.6	484.2	489.9
496.6	502.9	503.4	521.1	536.4	541.2	542.1	566.8	568.7
590.2	608.4	621.0	641.0	647.3	666.5	667.3	674.3	677.7
692.8	698.9	716.6	724.9	733.7	734.2	742.7	752.3	769.5
770.2	783.1	788.8	797.0	815.6	820.5	823.4	829.6	852.6
859.8	868.9	878.9	881.0	889.4	897.0	907.6	919.3	926.7
934.1	939.1	943.1	944.2	949.6	950.9	952.9	953.2	953.6
973.0	982.4	986.8	989.9	994.2	998.0	999.2	999.3	1001.2
1014.6	1017.1	1024.2	1032.5	1035.6	1038.7	1039.3	1040.1	1043.9
1053.5	1060.5	1076.1	1110.8	1124.0	1124.7	1129.6	1131.1	1146.2
1150.1	1158.9	1162.8	1177.8	1186.2	1190.7	1192.9	1220.8	1228.5
1233.0	1239.3	1240.3	1240.7	1242.6	1245.3	1259.3	1269.1	1283.4
1285.0	1311.0	1314.3	1322.5	1340.6	1344.7	1356.1	1359.0	1377.4
1379.0	1379.2	1380.0	1381.8	1389.1	1390.5	1400.8	1407.0	1408.2
1408.8	1411.8	1420.5	1429.0	1448.7	1449.5	1452.4	1452.8	1454.9
1455.8	1456.4	1468.6	1473.3	1474.6	1476.2	1476.9	1477.2	1477.8
1482.3	1492.3	1493.4	1495.4	1509.5	1517.6	1520.1	1523.0	1556.8

1581.3 1608.1 1620.5 1626.3 1650.0 1656.3 1663.3 1672.1 1675.1
1698.4 1700.1 1758.1 1850.4 2903.4 2935.3 3049.1 3049.5 3050.0
3051.4 3054.2 3056.1 3144.6 3144.7 3145.3 3146.2 3147.0 3148.8
3149.9 3150.8 3152.6 3153.8 3153.9 3157.1 3163.5 3191.9 3204.7
3206.0 3207.7 3208.0 3219.2 3220.3 3220.8 3221.8 3227.5 3232.1
3236.6 3247.4 3248.6 3252.4 3270.6 3273.0

Pt-C_triplet

There are 264 frequencies (cm^-1):

16.0 17.5 24.6 28.2 33.0 36.5 38.7 47.5 51.5
54.2 59.9 63.8 72.9 76.0 87.1 88.1 108.7 127.1
137.9 141.5 143.4 159.3 172.1 180.7 194.6 198.8 200.3
211.8 217.0 238.7 241.8 242.7 247.2 253.6 268.9 278.6
280.8 284.8 288.6 289.3 305.1 312.4 318.6 322.6 331.4
333.4 339.7 343.7 345.1 356.5 368.8 373.8 378.6 400.8
409.1 443.4 450.9 455.4 455.9 458.7 464.1 473.4 476.0
483.5 493.3 495.6 498.2 506.8 520.7 530.0 541.3 550.1
563.9 568.9 583.5 598.4 607.2 611.4 622.0 631.9 646.0
659.4 666.3 674.5 677.7 688.5 693.8 702.5 714.4 729.2
729.8 736.5 743.3 756.5 765.6 770.1 777.6 785.2 799.3
803.3 814.5 822.2 826.8 836.0 841.7 852.0 860.7 863.3
873.9 877.6 880.4 893.2 925.8 934.0 939.1 940.1 943.2
944.3 949.6 950.7 953.2 953.7 971.6 972.7 982.9 989.1
992.8 993.7 998.0 998.9 999.9 1013.7 1022.4 1022.8 1032.7
1035.6 1038.8 1039.0 1040.3 1052.2 1062.7 1075.8 1110.9 1122.1
1125.5 1128.8 1131.2 1140.4 1146.6 1152.3 1161.5 1162.8 1164.0
1177.3 1185.7 1188.8 1193.3 1208.6 1212.5 1228.7 1234.9 1239.0
1240.8 1240.8 1244.5 1259.6 1267.5 1276.5 1284.1 1311.4 1313.8
1326.4 1340.4 1344.1 1353.8 1357.0 1369.2 1377.5 1379.2 1379.8
1381.3 1383.4 1388.8 1396.3 1406.8 1408.2 1411.8 1415.7 1418.0
1422.6 1447.3 1448.5 1449.4 1452.5 1455.1 1455.8 1456.0 1466.4
1473.0 1474.2 1475.4 1476.9 1476.9 1477.2 1482.0 1492.4 1492.9
1495.8 1513.6 1520.1 1521.7 1536.4 1556.9 1575.0 1605.7 1622.1
1630.2 1648.1 1655.9 1663.0 1670.9 1676.8 1698.2 1700.1 1834.3
1871.0 3048.5 3048.9 3049.8 3050.2 3053.7 3055.2 3143.8 3144.2
3144.8 3145.0 3147.0 3149.1 3149.5 3149.8 3151.1 3152.6 3154.1
3155.7 3159.8 3203.6 3206.8 3207.9 3213.8 3219.4 3219.9 3220.6
3228.6 3236.4 3238.4 3240.8 3245.4 3245.6 3247.8 3251.3 3269.9
3273.1 3826.0 3826.9

Pt-C'_triplet

There are 276 frequencies (cm^-1):

15.3 19.4 24.9 29.4 32.6 39.3 42.8 46.1 54.1
56.4 61.8 65.3 70.6 73.3 86.7 88.5 104.5 111.0

122.2	141.6	145.8	150.6	159.6	169.2	170.2	184.2	188.8
196.8	202.2	203.8	217.6	220.9	231.1	236.2	242.1	246.8
254.8	265.2	269.2	273.5	280.1	284.0	285.7	289.2	294.1
304.4	306.1	310.1	318.6	330.5	333.3	338.9	340.7	343.7
348.9	356.1	369.3	373.3	383.9	400.8	413.5	448.9	451.1
455.5	456.0	459.7	469.7	472.6	485.2	489.6	493.1	497.9
504.2	512.1	519.6	532.6	540.6	544.9	548.2	563.9	567.4
574.5	582.3	595.3	608.2	614.1	620.4	623.4	643.0	658.8
661.8	668.3	679.2	689.2	691.2	694.1	704.0	709.4	728.8
730.8	743.0	757.7	765.6	771.6	774.6	788.4	796.4	799.7
810.5	813.4	825.7	827.9	842.3	850.2	852.3	863.8	866.1
877.5	879.8	891.6	917.3	929.8	930.8	940.2	942.7	943.5
949.8	951.0	955.7	960.1	967.1	976.5	983.3	987.2	990.5
994.1	997.7	999.6	1001.0	1004.6	1013.9	1015.5	1026.0	1030.4
1036.2	1039.2	1039.7	1045.1	1046.9	1059.2	1065.5	1071.2	1116.2
1126.2	1128.6	1130.9	1134.3	1136.7	1145.7	1153.8	1157.6	1164.7
1165.1	1170.5	1190.2	1192.5	1194.3	1207.0	1211.0	1213.7	1229.2
1238.2	1240.7	1241.8	1248.3	1266.3	1276.5	1280.0	1307.3	1309.8
1314.6	1324.4	1337.5	1344.9	1352.4	1367.0	1377.0	1377.1	1380.8
1382.0	1382.9	1389.0	1390.9	1399.8	1406.1	1407.0	1408.5	1413.0
1418.7	1433.1	1449.1	1449.6	1453.1	1456.6	1457.6	1461.3	1462.9
1471.8	1473.3	1474.8	1477.8	1478.7	1479.5	1482.0	1486.0	1493.8
1494.2	1497.6	1500.1	1526.2	1532.6	1546.0	1556.3	1563.8	1604.3
1640.7	1653.6	1658.3	1666.6	1679.8	1682.4	1689.0	1698.8	1699.9
1816.2	1873.0	3042.2	3046.4	3050.3	3050.7	3051.9	3057.0	3082.6
3137.6	3141.1	3143.4	3145.0	3146.2	3146.3	3151.2	3151.3	3152.2
3154.1	3155.3	3157.6	3203.4	3205.7	3213.7	3219.3	3221.3	3221.7
3223.8	3228.5	3233.1	3239.2	3239.8	3245.7	3249.3	3253.0	3254.8
3265.8	3266.6	3825.5	3826.1	3869.5	3871.5			

Coordinates of the Pt(II)/Pt(IV) species

Pt-A

C	1.53276200	-2.40930000	-2.87735100
C	0.19668000	-2.76978300	-2.90777500
C	-0.67519800	-2.22699400	-1.96035000
N	-0.20705900	-1.36836100	-1.01869400
C	1.07895700	-0.98637000	-0.98690800
C	1.98150700	-1.50648000	-1.91935500
C	1.54040700	0.14916800	-0.05234400
C	1.00516600	0.23264700	1.39080900
N	-0.31877100	0.19235700	1.59821000
C	-0.87120400	0.50087700	2.79747700
C	-0.04952600	0.79290900	3.88952500
C	1.32382300	0.78919200	3.71285100
C	1.86138700	0.52895500	2.45424400
C	-2.10982600	-2.51126500	-1.88382800
C	-2.33597800	0.54345400	2.79875800
C	-2.73627200	-3.41508700	-2.75435000
C	-4.08883100	-3.69713100	-2.61898800
C	-4.80995800	-3.08642900	-1.59161100
C	-4.19009200	-2.18549000	-0.72789300
C	-2.83603900	-1.84477600	-0.85718100
C	-2.97637400	0.09285000	1.61011800
C	-4.35553400	0.32576800	1.51656100
C	-5.07740400	0.89705200	2.56406800
C	-4.43969900	1.26363900	3.75050300
C	-3.06473900	1.09752100	3.85990200
C	1.17223300	1.48275800	-0.73597300
C	3.06312800	0.24181300	-0.04644700
C	3.97062300	-0.69798000	0.42999500
C	5.34713000	-0.44995700	0.35848100
C	5.76646400	0.76989100	-0.20566100
C	4.86590700	1.71367100	-0.68662000
C	3.49732200	1.44799800	-0.60895100
C	2.33080400	2.21955000	-1.03471100
C	2.20861600	3.46467500	-1.64306400
C	0.93520200	3.95786900	-1.94147000
C	-0.22571400	3.22889000	-1.65034900
C	-0.08239200	1.97095000	-1.04270700
C	6.38903500	-1.45311200	0.85614500
C	5.74122100	-2.69863700	1.46157200
C	7.26830600	-1.88861600	-0.32577100

C	7.26272900	-0.78960800	1.93079700
C	-1.63929800	3.72656000	-1.95112800
C	-1.63555600	5.11193000	-2.59609100
C	-2.32409900	2.73663300	-2.90657600
C	-2.43418700	3.79044800	-0.63699100
Pt	-1.69125000	-0.67769500	0.28923500
H	2.23263800	-2.81933000	-3.60909500
H	-0.17711300	-3.46133500	-3.66166200
H	3.02191600	-1.19101400	-1.90563200
H	-0.49002100	1.01534800	4.86100100
H	1.98845200	1.00826600	4.55171100
H	2.93599800	0.57720400	2.29700100
H	-2.16661800	-3.91316300	-3.54232500
H	-4.77871300	-1.75174600	0.08060400
H	-4.88384400	0.07013200	0.59638100
H	-2.55680000	1.43108300	4.76832900
H	3.59516400	-1.62895800	0.85699800
H	6.83502600	0.98684100	-0.27474900
H	5.22938500	2.64763800	-1.12147900
H	3.09433000	4.05696600	-1.88584900
H	0.85702500	4.93751800	-2.41439000
H	-0.96603500	1.37018100	-0.80134000
H	6.52188700	-3.39217600	1.80841000
H	5.10807400	-2.45199900	2.32761100
H	5.12332400	-3.23798300	0.72757800
H	8.02650400	-2.61567900	0.00589700
H	7.79642000	-1.03633500	-0.77849200
H	6.66038800	-2.36248700	-1.11172900
H	6.65314500	-0.46554500	2.78834600
H	8.02261200	-1.49693300	2.29918100
H	7.79032300	0.09360600	1.54170400
H	-2.66908300	5.43248100	-2.79653300
H	-1.17541400	5.86683400	-1.93977600
H	-1.09624800	5.11467600	-3.55611100
H	-3.34894500	3.07235100	-3.13115100
H	-2.39230800	1.72918400	-2.46894700
H	-1.77235700	2.65901400	-3.85614400
H	-1.95722300	4.47655300	0.07980300
H	-3.45710000	4.15150600	-0.82851600
H	-2.51473500	2.80284500	-0.15824600
H	-5.00788100	1.70186300	4.57397800
H	-4.57524400	-4.40022400	-3.29866000
H	-5.86971500	-3.32099900	-1.45781500
H	-6.15271600	1.06213100	2.45272200

Pt-A'

C	1.39827700	-1.07912700	-3.55952800
C	0.09097800	-1.53909500	-3.63468200
C	-0.71956800	-1.44337700	-2.50549400
N	-0.23359000	-0.89971400	-1.36332000
C	1.01828700	-0.45262200	-1.26191300
C	1.87082200	-0.54195600	-2.37217300
C	1.56395900	0.29168500	-0.03018600
C	0.93912300	0.17462700	1.37075000
N	-0.38383600	0.11714200	1.54472800
C	-0.95804100	0.18047300	2.76778300
C	-0.16894100	0.32485400	3.90810600
C	1.20755300	0.38512800	3.75828900
C	1.76976800	0.31164700	2.49006400
C	-2.10284000	-1.92956800	-2.42769800
C	-2.42416300	0.10491100	2.76977200
C	-2.70596600	-2.65005300	-3.46687500
C	-3.97984400	-3.18292700	-3.30895200
C	-4.64509900	-3.01989800	-2.09514500
C	-4.05457700	-2.29574700	-1.05804700
C	-2.80040200	-1.70627900	-1.21692800
C	-3.04665400	-0.26971600	1.55641900
C	-4.43630200	-0.18233600	1.47189200
C	-5.20105700	0.18628000	2.58058600
C	-4.58440600	0.48835700	3.79355200
C	-3.19690000	0.46000500	3.88211400
C	1.53857000	1.79255200	-0.37391000
C	3.06710800	0.04421900	0.06763400
C	3.70497700	-1.16023000	0.33091600
C	5.10302200	-1.20911800	0.40985100
C	5.81484600	-0.01111200	0.21007200
C	5.18061900	1.19671100	-0.06448100
C	3.78688100	1.22915200	-0.13841600
C	2.84341500	2.31284900	-0.41706900
C	3.01966200	3.66082600	-0.71379000
C	1.89531600	4.45487800	-0.96167100
C	0.59475300	3.93280400	-0.92410500
C	0.42670600	2.57007300	-0.62202800
C	5.86311200	-2.50166200	0.71311500
C	4.92410500	-3.70170700	0.84058600
C	6.85896300	-2.78654400	-0.42058500
C	6.62435300	-2.33570600	2.03670100
C	-0.65882500	4.76088300	-1.19994500

C	-0.33396400	6.22346000	-1.49921900
C	-1.39698500	4.15188500	-2.40335200
C	-1.57392700	4.69088100	0.03277900
Pt	-1.73024400	-0.67900600	0.11637600
H	2.05418500	-1.13589500	-4.43110700
H	-0.30005400	-1.96234300	-4.55901000
H	2.89210200	-0.17173600	-2.29983700
H	-0.62994500	0.36432400	4.89437700
H	1.85379100	0.48718900	4.63300800
H	2.84847200	0.37174300	2.36463300
H	-2.17278800	-2.81671500	-4.40527100
H	-5.63257100	-3.46538800	-1.94877400
H	-4.58336800	-2.20531100	-0.10858000
H	-4.94021400	-0.38943200	0.52619400
H	-6.28908700	0.24347100	2.49147100
H	-2.71475600	0.74817000	4.81911100
H	3.10173200	-2.05654300	0.48187700
H	6.90579000	-0.02272200	0.26908700
H	5.76973600	2.10382700	-0.21877000
H	4.01942400	4.09995200	-0.75945300
H	2.04940800	5.50938300	-1.19450900
H	-0.57645400	2.11922700	-0.60270600
H	5.50905500	-4.61044200	1.04792400
H	4.20408700	-3.57748000	1.66354900
H	4.35696300	-3.87571600	-0.08647200
H	7.41430000	-3.71614500	-0.21829300
H	7.59549500	-1.97748700	-0.53484400
H	6.33648900	-2.90366700	-1.38243400
H	5.92894200	-2.13257300	2.86550300
H	7.18323900	-3.25427600	2.27638500
H	7.34557800	-1.50600400	1.99224400
H	-1.26441000	6.78134300	-1.68531300
H	0.18141900	6.71059200	-0.65661900
H	0.29778000	6.32632800	-2.39532400
H	-2.30076400	4.74039600	-2.63130600
H	-1.70789600	3.11552000	-2.19903000
H	-0.75579800	4.15267400	-3.29880800
H	-1.06840000	5.09230900	0.92494900
H	-2.48924300	5.28004300	-0.13809400
H	-1.87229800	3.65306300	0.24275100
H	-5.18221100	0.77289800	4.66209100
H	-4.44276700	-3.74384400	-4.12367900
O	-1.13651200	-2.38447600	0.98228900
H	-1.70921100	-3.08617900	0.65242700

O	-2.19878300	1.08468800	-0.75801800
H	-3.05371200	1.36174600	-0.41004000

Pt-B

C	1.99840400	3.00404700	2.26142600
C	0.64729200	3.31024100	2.28348300
C	-0.23238700	2.54336000	1.51859100
N	0.23476700	1.52152900	0.75675600
C	1.53496200	1.19380900	0.73756300
C	2.44864100	1.93802500	1.49235300
C	2.01547600	-0.09383700	0.04355600
C	1.41249500	-0.53417500	-1.30468400
N	0.08045400	-0.59566000	-1.43955000
C	-0.50996400	-1.20186800	-2.49904200
C	0.27208200	-1.72245300	-3.53199600
C	1.65092700	-1.62459200	-3.44009100
C	2.23171700	-1.04494300	-2.31556200
C	-1.68458100	2.74285000	1.46344600
C	-1.97128700	-1.28684600	-2.41300300
C	-2.31684600	3.78491900	2.15798100
C	-3.68873400	3.95793700	2.05776700
C	-4.42684300	3.09671400	1.23864400
C	-3.79063400	2.06430000	0.54114300
C	-2.41730000	1.83113500	0.64872700
C	-2.57148200	-0.59169500	-1.32743200
C	-3.93692900	-0.82448200	-1.12353900
C	-4.68793500	-1.63089900	-1.98301300
C	-4.08451500	-2.24966400	-3.08601900
C	-2.72588900	-2.08465900	-3.28974600
C	1.77056000	-1.26121200	1.02322200
C	3.53776500	-0.10671400	-0.04467500
C	4.35341900	0.75782200	-0.76597400
C	5.74442800	0.59768900	-0.74356600
C	6.27129600	-0.46010400	0.02195000
C	5.46255800	-1.32368500	0.75243900
C	4.07804100	-1.14459500	0.72372000
C	2.98853400	-1.86069700	1.38598300
C	2.97833700	-2.95001500	2.25121500
C	1.75701400	-3.42640100	2.73605500
C	0.53761000	-2.83459400	2.37963600
C	0.56742700	-1.73012600	1.51269900
C	6.68888800	1.51719900	-1.51961900
C	5.93860100	2.64885900	-2.22270700
C	7.70248800	2.14335700	-0.55051400

C	7.43210500	0.69058600	-2.57964100
C	-0.82188600	-3.32869700	2.87376000
C	-0.69406800	-4.54235200	3.79338300
C	-1.51618400	-2.19436200	3.64359400
C	-1.68068700	-3.71669000	1.65925600
Pt	-1.26415200	0.49577500	-0.28264300
H	2.70725100	3.58649500	2.85418700
H	0.27163100	4.13080900	2.89334200
H	3.50228900	1.66882400	1.49038900
H	-0.20051700	-2.19114400	-4.39459300
H	2.28585700	-2.01607200	-4.23807200
H	3.31362500	-1.00937200	-2.21423400
H	-1.73819000	4.47196300	2.77895500
H	-4.42238400	1.45552900	-0.10507100
H	-4.44810100	-0.38401600	-0.26439600
H	-2.24422400	-2.60085000	-4.12355500
H	3.89659000	1.56185100	-1.34482900
H	7.35297300	-0.61010300	0.05196000
H	5.90954600	-2.12793600	1.34138200
H	3.91080500	-3.43487100	2.55039900
H	1.76639000	-4.28451200	3.40901800
H	-0.36456200	-1.23897300	1.21307000
H	6.65408900	3.29426400	-2.75404400
H	5.22182200	2.27008900	-2.96718900
H	5.38918600	3.28080300	-1.50806000
H	8.38788500	2.81231200	-1.09448000
H	8.31370000	1.38243000	-0.04357200
H	7.19136700	2.73509200	0.22450000
H	6.72471700	0.23870500	-3.29206100
H	8.12800600	1.32843000	-3.14744400
H	8.01627000	-0.12362000	-2.12558900
H	-1.69293800	-4.86460600	4.12411200
H	-0.22410000	-5.39577800	3.28044500
H	-0.10485100	-4.31402100	4.69509000
H	-2.49857700	-2.53000300	4.01172400
H	-1.68314700	-1.31267300	3.00652500
H	-0.91440100	-1.87900200	4.51008900
H	-1.19841600	-4.51625900	1.07609200
H	-2.66599000	-4.08111600	1.99042900
H	-1.85122700	-2.86244800	0.98687300
H	-4.69903000	-2.86626800	-3.74507400
H	-4.19071700	4.76303600	2.60171300
C	-5.88871400	3.27379400	1.10902700
O	-6.61029400	2.57129300	0.44534500

H	-6.30620100	4.13338700	1.69658600
C	-6.13067800	-1.83026500	-1.72398500
O	-6.85867400	-2.51200900	-2.40289500
H	-6.52141700	-1.27643700	-0.83195700

Pt-C

C	2.10909500	3.24281700	1.93484600
C	0.74451700	3.48150100	1.94020600
C	-0.09901600	2.60248400	1.25887500
N	0.41747600	1.53801300	0.59394700
C	1.73239900	1.27377200	0.59677400
C	2.61067500	2.13121000	1.26811800
C	2.26958700	-0.05446800	0.03045900
C	1.69311400	-0.63926700	-1.27365200
N	0.36523800	-0.76977700	-1.40260100
C	-0.19541000	-1.48664700	-2.40798200
C	0.61220700	-2.05657100	-3.39439600
C	1.98529400	-1.89333700	-3.31019200
C	2.53714500	-1.19848500	-2.23716800
C	-1.55913400	2.72398500	1.19511100
C	-1.65184600	-1.62928100	-2.31297100
C	-2.24156400	3.79393900	1.79323900
C	-3.61862600	3.89932900	1.68253600
C	-4.31551900	2.93336800	0.94601000
C	-3.63418700	1.86821000	0.35042500
C	-2.24916300	1.70922700	0.47485200
C	-2.28396400	-0.88449900	-1.27939000
C	-3.63419600	-1.16232900	-1.04167500
C	-4.35119000	-2.05863000	-1.84030200
C	-3.72539100	-2.72171700	-2.90238700
C	-2.37340000	-2.51696000	-3.12509400
C	2.05857600	-1.12727400	1.11972700
C	3.79276000	-0.01721900	-0.04491100
C	4.58463300	0.79764400	-0.84685300
C	5.98083700	0.70006500	-0.79194100
C	6.53758900	-0.24201300	0.09410600
C	5.75308700	-1.05746500	0.90217600
C	4.36291900	-0.94441700	0.83570500
C	3.29397300	-1.63407800	1.55661000
C	3.31488100	-2.62612900	2.53185100
C	2.10689800	-3.09627900	3.05491500
C	0.87040800	-2.59311400	2.62812200
C	0.86876600	-1.58959300	1.64616400
C	6.90136700	1.57121400	-1.64933300

C	6.11449700	2.53114200	-2.54253600
C	7.81237800	2.39880200	-0.73067500
C	7.75897200	0.66737000	-2.54714000
C	-0.47600700	-3.07597900	3.16648200
C	-0.31392200	-4.16329300	4.22809000
C	-1.22146500	-1.88439500	3.78776600
C	-1.30515000	-3.63982900	2.00131500
Pt	-1.03284600	0.35119400	-0.33887400
H	2.78970600	3.91455800	2.46270500
H	0.33025000	4.33646000	2.47297300
H	3.67635600	1.91529600	1.28389900
H	0.16308700	-2.61546500	-4.21481400
H	2.63932400	-2.32317100	-4.07223600
H	3.61619300	-1.10982300	-2.13818100
H	-1.69677100	4.56115500	2.34743500
H	-4.23367100	1.16869300	-0.23108200
H	-4.15948700	-0.68541700	-0.21537700
H	-1.87549100	-3.07193300	-3.92355200
H	4.10324800	1.51315600	-1.51485500
H	7.62404400	-0.33889700	0.15637400
H	6.22318400	-1.77313200	1.58061500
H	4.26158600	-3.03840500	2.88951600
H	2.14138200	-3.87561000	3.81693600
H	-0.07788300	-1.16969900	1.28848000
H	6.81099300	3.13838300	-3.14023000
H	5.45883500	1.99299100	-3.24402000
H	5.49290400	3.22350200	-1.95433900
H	8.48606000	3.03356800	-1.32788300
H	8.43721100	1.75955900	-0.08954300
H	7.21871500	3.05381500	-0.07445200
H	7.12618400	0.05962200	-3.21227600
H	8.42966700	1.27488700	-3.17527100
H	8.38472400	-0.02051000	-1.95945000
H	-1.30383400	-4.48249100	4.58744200
H	0.19529000	-5.05342000	3.82730900
H	0.25437500	-3.80254700	5.09945600
H	-2.19434800	-2.21118200	4.18768500
H	-1.41480400	-1.09367300	3.04718600
H	-0.64123700	-1.44368900	4.61328300
H	-0.78783500	-4.48551000	1.52217700
H	-2.28053300	-3.99801400	2.36697900
H	-1.49908300	-2.88028400	1.22859300
H	-4.31300400	-3.40433400	-3.51844400
H	-4.15736100	4.72571600	2.14659900

C	-5.78791500	3.00467400	0.76350300
O	-6.44559700	2.21576500	0.13170900
O	-6.34574100	4.05852200	1.38315000
H	-7.29428200	4.00343700	1.19514800
C	-5.79405800	-2.32529600	-1.60607000
O	-6.48013000	-3.03905000	-2.29652500
O	-6.27779900	-1.68145200	-0.53689700
H	-7.22285300	-1.88766900	-0.49569700

Pt-C'

C	1.98610700	-2.05750400	-3.15694700
C	0.61923600	-2.29156000	-3.22008100
C	-0.19386200	-1.78552100	-2.20936800
N	0.34597100	-1.07383000	-1.19103700
C	1.65415300	-0.83098000	-1.10582800
C	2.50990200	-1.33217700	-2.09883800
C	2.28513300	0.09578200	-0.05116400
C	1.62703000	0.40120900	1.30486800
N	0.30649400	0.54834600	1.43284100
C	-0.26612000	0.96895300	2.58427200
C	0.52065900	1.27644500	3.69225600
C	1.89590800	1.13470200	3.58840000
C	2.45587900	0.69960500	2.39524800
C	-1.64630200	-1.99283100	-2.12824300
C	-1.72879100	1.08860200	2.54293700
C	-2.34587300	-2.77751700	-3.05518800
C	-3.70275900	-3.01880200	-2.89595200
C	-4.36234100	-2.49827100	-1.77854700
C	-3.66750700	-1.71375800	-0.85113200
C	-2.32218100	-1.40965800	-1.02971500
C	-2.38207100	0.55577900	1.40747100
C	-3.74329200	0.80391400	1.25412600
C	-4.46553800	1.48675000	2.24041200
C	-3.82352000	1.95094000	3.39140000
C	-2.45699300	1.76379700	3.53212300
C	2.49756200	1.46033100	-0.73441100
C	3.73024200	-0.33740300	0.18330300
C	4.16767900	-1.51324100	0.77749000
C	5.53932800	-1.74200300	0.94734100
C	6.43235600	-0.75689500	0.48448700
C	5.99882500	0.42026900	-0.11772200
C	4.62817200	0.63933800	-0.26787500
C	3.86858000	1.75229400	-0.83835700
C	4.25768300	2.95332500	-1.42297500

C	3.27525800	3.83253300	-1.88951800
C	1.90810800	3.53854900	-1.78890200
C	1.52492900	2.32188200	-1.19719800
C	6.08372100	-3.00241300	1.62147800
C	4.96322400	-3.94854200	2.05470400
C	6.99949200	-3.74785900	0.64027000
C	6.88407500	-2.59757900	2.86821400
C	0.80298200	4.46876000	-2.28600700
C	1.35849300	5.75381800	-2.89740500
C	-0.03181300	3.72710200	-3.34260500
C	-0.10481200	4.83114500	-1.09924200
Pt	-1.12166900	-0.32278600	0.13497900
H	2.64828500	-2.43971300	-3.93685500
H	0.18834600	-2.85897700	-4.04375300
H	3.57870200	-1.13424500	-2.04031100
H	0.05831100	1.60499700	4.62220900
H	2.54070700	1.36263900	4.43999600
H	3.53480500	0.60064600	2.30128900
H	-1.82857700	-3.21633900	-3.91038700
H	-4.22675800	-1.36018000	0.01470100
H	-4.27651900	0.48275300	0.36051400
H	-1.95118400	2.17225100	4.40940900
H	3.42959700	-2.24091700	1.11774200
H	7.50708700	-0.91448900	0.60215900
H	6.72449400	1.16055700	-0.46262300
H	5.31475400	3.21316100	-1.52031900
H	3.59607600	4.77044200	-2.34476900
H	0.46208100	2.05172500	-1.11456400
H	5.39347700	-4.83860300	2.53793100
H	4.28445100	-3.47438300	2.77960500
H	4.36312600	-4.29299400	1.19890800
H	7.40527900	-4.65819300	1.10942900
H	7.85135500	-3.12858500	0.32198400
H	6.44568800	-4.04650900	-0.26293600
H	6.24567700	-2.05885500	3.58530500
H	7.28645800	-3.49039500	3.37262000
H	7.73287000	-1.94416500	2.61711300
H	0.52940300	6.39404600	-3.23522700
H	1.94885000	6.33303900	-2.17020100
H	1.99508700	5.54871900	-3.77229300
H	-0.83488300	4.38216700	-3.71769800
H	-0.49860500	2.82296000	-2.92180100
H	0.59240100	3.42947000	-4.19970900
H	0.46490200	5.33901700	-0.30553300

H	-0.90997800	5.50717800	-1.42900800
H	-0.57164000	3.93275300	-0.66864800
H	-4.41128600	2.47454500	4.14719200
H	-4.25140900	-3.62189500	-3.61981100
O	-0.80617700	-1.89400000	1.33531200
H	-1.54512800	-2.50224300	1.22147200
O	-1.29311100	1.27607500	-1.09204400
H	-2.10777000	1.73688200	-0.86190400
C	-5.80547000	-2.74379800	-1.52802000
O	-6.41587800	-2.33186700	-0.57323200
O	-6.38816800	-3.47963500	-2.48689100
H	-7.31573000	-3.57528800	-2.22448400
C	-5.92444600	1.73490000	2.10423200
O	-6.60448600	2.28453700	2.93523800
O	-6.42408200	1.27883900	0.94948200
H	-7.37542400	1.45817900	0.96878600

Coordinates of the Pt(II)/Pt(IV) triplet species

Pt-A_triplet

C	1.51740900	-2.38780000	-2.92543200
C	0.20102000	-2.75680500	-2.94812500
C	-0.69474200	-2.23033800	-1.98117300
N	-0.21731400	-1.34080700	-1.00692600
C	1.06766900	-0.96041500	-1.00031600
C	1.96394500	-1.47001800	-1.93905200
C	1.53388000	0.17784500	-0.06844000
C	0.99080300	0.26498700	1.36993400
N	-0.33743300	0.20773900	1.57533900
C	-0.89813900	0.52431400	2.77335600
C	-0.08063700	0.84588300	3.86094100
C	1.29178500	0.85736800	3.68721300
C	1.83632900	0.58388200	2.43189800
C	-2.06991500	-2.51506700	-1.89675800
C	-2.36040700	0.53066100	2.78344900
C	-2.77597000	-3.35319800	-2.81388400
C	-4.07120000	-3.71116300	-2.55311300
C	-4.74829300	-3.25726600	-1.37550100
C	-4.11072400	-2.38950100	-0.50871100
C	-2.80634800	-1.91809400	-0.75717100
C	-3.00034100	0.04670200	1.60777400
C	-4.39083600	0.21374500	1.53059400
C	-5.12124600	0.76316300	2.58239300
C	-4.48131200	1.17251100	3.75518600
C	-3.10042900	1.06541000	3.84852800
C	1.18225600	1.51633700	-0.74854300
C	3.05670900	0.25511500	-0.05246200
C	3.95086700	-0.69447300	0.42896900
C	5.33024500	-0.46181500	0.36309100
C	5.76635200	0.75241200	-0.20041700
C	4.87871800	1.70581600	-0.68661100
C	3.50711400	1.45509600	-0.61433000
C	2.35073300	2.23883400	-1.04544400
C	2.24780000	3.48446300	-1.65613600
C	0.98289600	3.99446300	-1.96085200
C	-0.18865700	3.28264900	-1.67065700
C	-0.06438800	2.02604600	-1.05622900
C	6.35818800	-1.47765400	0.86413000
C	5.69280000	-2.71475000	1.46784100
C	7.23475400	-1.92441000	-0.31555300

C	7.23728900	-0.82513300	1.94101700
C	-1.59325100	3.79797700	-1.98479000
C	-1.56696700	5.18735000	-2.62078600
C	-2.27473500	2.82199000	-2.95687100
C	-2.40597200	3.86408000	-0.68196000
Pt	-1.69817600	-0.68627700	0.27254300
H	2.22357300	-2.78286300	-3.65794400
H	-0.17101500	-3.45633500	-3.69729400
H	2.99957700	-1.14022500	-1.93337900
H	-0.52581400	1.07689600	4.82815600
H	1.95172500	1.09923900	4.52339900
H	2.91067700	0.64298000	2.27597600
H	-2.27708900	-3.73490600	-3.70658000
H	-4.63481700	-2.04387800	0.38305700
H	-4.91856300	-0.07676700	0.62000100
H	-2.59641400	1.42787000	4.74782900
H	3.56218700	-1.62145200	0.85206200
H	6.83766600	0.95678300	-0.26552300
H	5.25462800	2.63471300	-1.12181100
H	3.14259100	4.06387800	-1.89661400
H	0.91993600	4.97372900	-2.43671600
H	-0.95871700	1.44454700	-0.81723800
H	6.46358100	-3.41781200	1.81769200
H	5.05972300	-2.45947600	2.33142200
H	5.07048300	-3.24614000	0.73186900
H	7.98264900	-2.66140000	0.01774100
H	7.77490800	-1.07869700	-0.76640700
H	6.62235300	-2.38963700	-1.10312400
H	6.62931200	-0.49300500	2.79665200
H	7.98693400	-1.54205800	2.31191000
H	7.77736100	0.05110900	1.55320600
H	-2.59479400	5.52154700	-2.82831400
H	-1.10344100	5.93217100	-1.95547500
H	-1.01934900	5.18994700	-3.57598000
H	-3.29408400	3.16731700	-3.19191500
H	-2.35464600	1.81124900	-2.52898200
H	-1.71091700	2.74705400	-3.89943900
H	-1.93196300	4.54173200	0.04472200
H	-3.42227000	4.23669800	-0.88599100
H	-2.50388500	2.87572900	-0.20809600
H	-5.05625600	1.59689400	4.58115700
H	-4.59575900	-4.37364000	-3.24697200
H	-5.76911900	-3.59072900	-1.17822000
H	-6.20417900	0.88035500	2.48593700

Pt-A'_triplet

C	1.38162700	-0.99237300	-3.59539100
C	0.10411600	-1.47104200	-3.67419200
C	-0.75112500	-1.40378900	-2.51327800
N	-0.23519400	-0.86026100	-1.32153900
C	0.98676900	-0.40676000	-1.24024500
C	1.85081700	-0.44846400	-2.38125100
C	1.55124200	0.31839600	-0.01011400
C	0.93007700	0.21833500	1.39292500
N	-0.38831200	0.11232000	1.57738200
C	-0.95910300	0.17412800	2.80296500
C	-0.16773800	0.36731600	3.93482300
C	1.20416400	0.48158900	3.77426900
C	1.76139100	0.40874100	2.50354500
C	-2.06593400	-1.83935700	-2.45964200
C	-2.42149200	0.04452200	2.81660300
C	-2.74905900	-2.47676400	-3.56947100
C	-3.95393100	-3.08907400	-3.36928100
C	-4.56530200	-3.09274200	-2.08590300
C	-3.96687300	-2.39732600	-1.01404200
C	-2.78217500	-1.71357700	-1.17696800
C	-3.04156700	-0.34333700	1.60592400
C	-4.43457600	-0.32044600	1.53680000
C	-5.20232900	0.00297100	2.65718100
C	-4.58565500	0.32335400	3.86592700
C	-3.19752100	0.35547300	3.94026600
C	1.54451500	1.80984100	-0.38130200
C	3.05030000	0.04888600	0.08019800
C	3.67171800	-1.16050300	0.35925100
C	5.06943700	-1.22779000	0.42820700
C	5.79699300	-0.04359200	0.20358100
C	5.17940900	1.16937200	-0.08608100
C	3.78600600	1.22104600	-0.15066800
C	2.85617200	2.31248200	-0.44364500
C	3.04383100	3.65244100	-0.76932200
C	1.92527100	4.45173500	-1.02725600
C	0.61819400	3.94540400	-0.97189500
C	0.43774900	2.59201100	-0.64059300
C	5.81378700	-2.52622100	0.74453300
C	4.85819600	-3.70974400	0.90012100
C	6.79341600	-2.84361700	-0.39455700
C	6.59045800	-2.35066500	2.05785400
C	-0.62758300	4.78099400	-1.25940500

C	-0.28801100	6.22955100	-1.60651000
C	-1.38722400	4.14558500	-2.43541300
C	-1.52909000	4.76014200	-0.01484700
Pt	-1.72215300	-0.69406900	0.14984200
H	2.04224800	-1.02176600	-4.46415400
H	-0.28262000	-1.89406300	-4.60064100
H	2.85510700	-0.03726100	-2.30798800
H	-0.62311000	0.40626200	4.92365100
H	1.85082900	0.62610800	4.64262000
H	2.83625300	0.50915100	2.36887400
H	-2.28532900	-2.49306400	-4.55673500
H	-5.51455800	-3.61155100	-1.93743500
H	-4.46724200	-2.39337900	-0.04427600
H	-4.93648800	-0.54523600	0.59387700
H	-6.29291600	0.00995800	2.58184200
H	-2.71954600	0.65309700	4.87639300
H	3.05582400	-2.04452600	0.53009200
H	6.88800800	-0.07081600	0.25488400
H	5.78106400	2.06468500	-0.25951600
H	4.04724400	4.08077800	-0.83198400
H	2.08880300	5.49912900	-1.28463000
H	-0.56771300	2.14670900	-0.60377400
H	5.43145100	-4.62408200	1.11528800
H	4.14918400	-3.56190400	1.72867900
H	4.27862600	-3.88890800	-0.01814600
H	7.33578800	-3.77897700	-0.18384400
H	7.54219100	-2.04887400	-0.52878200
H	6.25937200	-2.96657500	-1.34923500
H	5.90612700	-2.12540700	2.89012800
H	7.13891600	-3.27321800	2.30607200
H	7.32267300	-1.53191300	1.99385600
H	-1.21367300	6.79263100	-1.80044200
H	0.24108200	6.73607300	-0.78412100
H	0.33578100	6.29779000	-2.51146800
H	-2.28461200	4.74009500	-2.67242400
H	-1.71161000	3.12081600	-2.19652300
H	-0.75571200	4.10820600	-3.33687100
H	-1.00921600	5.18406300	0.85845100
H	-2.44029300	5.35316300	-0.19385700
H	-1.83574000	3.73279700	0.23150300
H	-5.18592500	0.57285900	4.74349900
H	-4.45220400	-3.59056600	-4.20267900
O	-1.11076000	-2.40493500	0.99158500
H	-1.65285600	-3.11104100	0.62117500

O	-2.19691000	1.09139200	-0.67545500
H	-3.03546200	1.37047400	-0.29072300

Pt-B_triplet

C	1.99341900	3.01372100	2.28032600
C	0.65789700	3.32106000	2.30618600
C	-0.24859400	2.54777500	1.53651100
N	0.23342500	1.50231000	0.75707700
C	1.53310200	1.18613900	0.74751100
C	2.44594500	1.93182500	1.49877200
C	2.01692700	-0.10426100	0.05736800
C	1.40654800	-0.54159700	-1.28693800
N	0.07043600	-0.59893600	-1.41644200
C	-0.53038100	-1.20339200	-2.47428700
C	0.24670000	-1.72819600	-3.50977000
C	1.62522800	-1.63470800	-3.42360700
C	2.21538600	-1.05475900	-2.30211100
C	-1.64462100	2.73231000	1.49501000
C	-1.99044600	-1.27739600	-2.39115400
C	-2.35245100	3.70637800	2.26483000
C	-3.69301200	3.88182500	2.07937500
C	-4.43415800	3.10256500	1.11538600
C	-3.75749000	2.13486100	0.36719800
C	-2.40885700	1.84984600	0.57080200
C	-2.59381000	-0.57620300	-1.31194200
C	-3.96606300	-0.77811500	-1.12324800
C	-4.72052600	-1.56942500	-1.99259900
C	-4.11339400	-2.20394400	-3.08528600
C	-2.75057300	-2.06424000	-3.27451800
C	1.78106600	-1.27507500	1.03397800
C	3.53842000	-0.11251100	-0.04178600
C	4.34716300	0.75495000	-0.76731600
C	5.73870600	0.59817600	-0.75330600
C	6.27344000	-0.45877400	0.00782300
C	5.47165300	-1.32510100	0.74253300
C	4.08675500	-1.14923700	0.72197400
C	3.00375000	-1.86914200	1.39047100
C	3.00536900	-2.95718000	2.25733900
C	1.79078700	-3.43911100	2.75276300
C	0.56591100	-2.85468200	2.40353600
C	0.58484300	-1.75421200	1.53168500
C	6.67655600	1.52237200	-1.53175000
C	5.91906000	2.65071200	-2.23239800
C	7.68928300	2.15303700	-0.56461100

C	7.42153200	0.69990700	-2.59379900
C	-0.78725400	-3.35181900	2.91240700
C	-0.64622300	-4.56284900	3.83360700
C	-1.47664000	-2.21836400	3.68789100
C	-1.65810200	-3.74657800	1.70888600
Pt	-1.27251500	0.49394800	-0.25064000
H	2.70887500	3.59422700	2.86627900
H	0.28398300	4.14965500	2.90720100
H	3.49853100	1.66064400	1.49939900
H	-0.23080100	-2.19583200	-4.37001100
H	2.25491900	-2.03033100	-4.22367800
H	3.29793900	-1.02329300	-2.20621500
H	-1.82264800	4.32604800	2.99065300
H	-4.34731800	1.58280300	-0.36426100
H	-4.47887400	-0.32204400	-0.27299500
H	-2.26980800	-2.58961800	-4.10285600
H	3.88493700	1.55968800	-1.34049400
H	7.35571600	-0.60526600	0.03153500
H	5.92427300	-2.12825300	1.32862100
H	3.94275100	-3.43592000	2.55073200
H	1.80972300	-4.29534900	3.42780100
H	-0.35452500	-1.27446900	1.24320600
H	6.63019300	3.29975000	-2.76512500
H	5.20240000	2.26873500	-2.97537800
H	5.36825300	3.27948600	-1.51614500
H	8.36984600	2.82595300	-1.10972800
H	8.30569000	1.39484900	-0.05984800
H	7.17693400	2.74132300	0.21212700
H	6.71493100	0.24457600	-3.30481100
H	8.11279400	1.34150300	-3.16299600
H	8.01105600	-0.11137400	-2.14144800
H	-1.64056900	-4.88671500	4.17605700
H	-0.17964200	-5.41628600	3.31772800
H	-0.04793200	-4.33058300	4.72818400
H	-2.45525800	-2.55500900	4.06490000
H	-1.65032300	-1.33648000	3.05294500
H	-0.86753100	-1.90128400	4.54846300
H	-1.17869000	-4.54486100	1.12173700
H	-2.63773900	-4.11499200	2.05202500
H	-1.84128400	-2.89510400	1.03626100
H	-4.73129000	-2.81106400	-3.74992400
H	-4.22863400	4.63870400	2.66104600
C	-5.86677900	3.28594600	0.94206600
O	-6.56423000	2.63286000	0.18732400

H	-6.31545500	4.09637800	1.57412600
C	-6.17232500	-1.73693200	-1.75647300
O	-6.89761800	-2.41735700	-2.43916600
H	-6.56803600	-1.16773300	-0.87711400

Pt-C_triplet

C	2.10526700	3.24543400	1.96658500
C	0.75705200	3.48749700	1.97561000
C	-0.11479100	2.60185400	1.29151500
N	0.41431300	1.50807700	0.61256600
C	1.72944000	1.25758300	0.62063300
C	2.60762800	2.11511900	1.28596300
C	2.26894500	-0.07120300	0.05289700
C	1.68011300	-0.64790200	-1.24733500
N	0.34718000	-0.77524500	-1.36587300
C	-0.22687100	-1.48970500	-2.36928200
C	0.57265700	-2.05974000	-3.36310700
C	1.94562400	-1.89835400	-3.29059800
C	2.51018500	-1.20520700	-2.22067400
C	-1.51773400	2.71766600	1.23692600
C	-1.68148800	-1.62508400	-2.27128100
C	-2.26859300	3.72965600	1.90534000
C	-3.61191700	3.84829900	1.68820000
C	-4.30906600	2.95990200	0.78743500
C	-3.60320600	1.93585800	0.16272400
C	-2.24143300	1.71679900	0.40738300
C	-2.31369400	-0.87771300	-1.24016200
C	-3.67057600	-1.13015100	-1.01282900
C	-4.39298300	-2.01519000	-1.81816200
C	-3.76636600	-2.68910700	-2.87391700
C	-2.41118900	-2.50313600	-3.08828300
C	2.07367100	-1.15284400	1.13506900
C	3.79058200	-0.02683900	-0.03963800
C	4.57013500	0.79577700	-0.84563500
C	5.96737000	0.70815700	-0.80141700
C	6.53822100	-0.23251100	0.07707500
C	5.76593700	-1.05645500	0.88824800
C	4.37469700	-0.95257500	0.83273500
C	3.31657100	-1.65173700	1.56042500
C	3.35529500	-2.64619400	2.53269600
C	2.15719500	-3.12873500	3.06642300
C	0.91255300	-2.63653300	2.65122200
C	0.89420800	-1.63275400	1.67021800
C	6.87492000	1.59265100	-1.65915500

C	6.07389100	2.54387400	-2.54905900
C	7.77564100	2.43065000	-0.73975000
C	7.74372700	0.70282300	-2.56014600
C	-0.42459500	-3.13049700	3.20289500
C	-0.24308900	-4.22066600	4.25845100
C	-1.16977700	-1.94629500	3.83889600
C	-1.26494200	-3.69643600	2.04680100
Pt	-1.04521100	0.34326500	-0.28600300
H	2.79412300	3.91371100	2.48711500
H	0.34562300	4.35111500	2.49803600
H	3.67225400	1.89687900	1.30266400
H	0.11590100	-2.61646900	-4.18060100
H	2.59199500	-2.32891900	-4.05873600
H	3.59035800	-1.11903300	-2.13120700
H	-1.77067600	4.43043300	2.57800000
H	-4.16020800	1.28670400	-0.51302500
H	-4.19513100	-0.63968800	-0.19326500
H	-1.91647500	-3.06398300	-3.88440100
H	4.07863000	1.51223400	-1.50488200
H	7.62583100	-0.32053200	0.13159300
H	6.24632600	-1.77039500	1.56129200
H	4.30917200	-3.05057000	2.88009700
H	2.20585200	-3.90951200	3.82613100
H	-0.06181600	-1.22618400	1.32849400
H	6.76140700	3.16033800	-3.14773400
H	5.42311400	1.99842300	-3.24954400
H	5.44536500	3.22778200	-1.95844300
H	8.44060100	3.07510800	-1.33641000
H	8.40906700	1.79852200	-0.09994700
H	7.17371400	3.07661900	-0.08214500
H	7.11869400	0.08823500	-3.22636600
H	8.40540300	1.32116500	-3.18731000
H	8.37964700	0.02198900	-1.97516000
H	-1.22673900	-4.54808100	4.62745800
H	0.26815500	-5.10550900	3.84876700
H	0.33207500	-3.85892600	5.12475400
H	-2.13667600	-2.27989200	4.24754200
H	-1.37440600	-1.15187300	3.10537400
H	-0.58244600	-1.50686300	4.65987900
H	-0.74797200	-4.53676100	1.55804400
H	-2.23304000	-4.06263900	2.42356900
H	-1.47469500	-2.93636900	1.27874000
H	-4.35868100	-3.36472000	-3.49316800
H	-4.18250100	4.63542300	2.18381700

C	-5.74452200	3.09110300	0.52454300
O	-6.39443800	2.37079200	-0.20036700
O	-6.31105000	4.12357100	1.18639500
H	-7.24623200	4.10841200	0.93660900
C	-5.84218200	-2.26136700	-1.59813200
O	-6.52909400	-2.96688700	-2.29571600
O	-6.32694100	-1.61037300	-0.53463200
H	-7.27598800	-1.79981800	-0.50403600

Pt-C'_triplet

C	1.96400800	-1.94344300	-3.24356500
C	0.61719900	-2.20122500	-3.30000200
C	-0.23159400	-1.72041500	-2.25172500
N	0.33643400	-1.01049300	-1.19263400
C	1.62341300	-0.76005300	-1.13171500
C	2.48957100	-1.21960100	-2.16376300
C	2.27143900	0.13815300	-0.06703500
C	1.61617500	0.46438300	1.28454800
N	0.29479500	0.58615500	1.42579400
C	-0.27524400	1.01813900	2.57483500
C	0.51867000	1.36444800	3.66633600
C	1.89553500	1.24952600	3.54878600
C	2.45134000	0.80090700	2.35865000
C	-1.60813100	-1.91016900	-2.18806400
C	-1.74104000	1.10082800	2.55151100
C	-2.36976500	-2.64160600	-3.18280500
C	-3.66272000	-2.97630700	-2.94541100
C	-4.30666800	-2.60450000	-1.70968600
C	-3.60580800	-1.81819700	-0.76250400
C	-2.32112600	-1.39706600	-0.99475600
C	-2.39829700	0.54133300	1.43120200
C	-3.77248100	0.72772900	1.30773600
C	-4.49871500	1.38686600	2.30712500
C	-3.84870000	1.88962300	3.43763600
C	-2.47352300	1.75686800	3.55070600
C	2.51809500	1.48767000	-0.76147200
C	3.70311500	-0.33125600	0.17349900
C	4.10736000	-1.51159200	0.78155200
C	5.47208700	-1.77060700	0.96258500
C	6.39117900	-0.81120700	0.49631200
C	5.99085300	0.37044300	-0.12031200
C	4.62700300	0.62099800	-0.28141100
C	3.89642700	1.74662300	-0.86485600
C	4.31090500	2.93418200	-1.45992800

C	3.34661200	3.82917600	-1.93453400
C	1.97202300	3.56718600	-1.83327500
C	1.56246000	2.36419600	-1.23348500
C	5.98188800	-3.03705200	1.65204000
C	4.83612900	-3.95062700	2.08902300
C	6.88403100	-3.81421700	0.68272100
C	6.78568900	-2.63958500	2.89892200
C	0.88921000	4.52032600	-2.33576000
C	1.47500900	5.77989600	-2.97145100
C	0.02371300	3.78769900	-3.37350500
C	0.00430700	4.92597700	-1.14575200
Pt	-1.12962700	-0.29968100	0.13634700
H	2.62954500	-2.29425600	-4.03482400
H	0.18709600	-2.76243700	-4.12843000
H	3.55152300	-0.98848200	-2.11536100
H	0.06122600	1.70296200	4.59507900
H	2.54475600	1.50921600	4.38780900
H	3.53109600	0.72040800	2.25411000
H	-1.89536300	-2.94342900	-4.11764300
H	-4.14646500	-1.54304300	0.14353300
H	-4.30925000	0.37090300	0.42941600
H	-1.96650900	2.18927800	4.41568400
H	3.34911300	-2.21693600	1.12440100
H	7.46095500	-0.99318500	0.62337400
H	6.73681800	1.08957200	-0.46657900
H	5.37294100	3.17138800	-1.56005000
H	3.68768600	4.75558700	-2.39850600
H	0.49583900	2.11075300	-1.14510700
H	5.24244800	-4.84597800	2.58298400
H	4.16635200	-3.45247100	2.80616000
H	4.23151500	-4.28887900	1.23400100
H	7.26392600	-4.72996800	1.16275600
H	7.75294900	-3.21923300	0.36427300
H	6.32801000	-4.10714600	-0.22094200
H	6.15673600	-2.07982700	3.60817100
H	7.16427300	-3.53722300	3.41299400
H	7.65110900	-2.00888100	2.64647000
H	0.66121300	6.43654200	-3.31467300
H	2.08473000	6.35507200	-2.25719100
H	2.10061100	5.54386400	-3.84644400
H	-0.76475400	4.45928400	-3.75000400
H	-0.46416000	2.90218600	-2.93746800
H	0.63089900	3.46123100	-4.23222600
H	0.59623800	5.43040200	-0.36628200

H	-0.78628900	5.61794400	-1.47741600
H	-0.48112600	4.04756500	-0.69498100
H	-4.44006700	2.39616200	4.20220600
H	-4.23612600	-3.54105100	-3.68161500
O	-0.78985500	-1.87577200	1.32360400
H	-1.53665100	-2.47862900	1.23133500
O	-1.28625700	1.32952800	-1.04755300
H	-2.06620200	1.82109800	-0.76532300
C	-5.69113600	-2.97729800	-1.41227400
O	-6.28322600	-2.68802500	-0.39504000
O	-6.27434900	-3.69145900	-2.39625400
H	-7.17311600	-3.87748700	-2.08812700
C	-5.97074700	1.56935000	2.21054100
O	-6.64922200	2.09804700	3.05632000
O	-6.48362600	1.07694900	1.07725600
H	-7.44103800	1.21462600	1.12334100