

<b>LoopSheet C</b>									
<b>SpiroChart Collection 1.6</b>									
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This spreadsheet tracks a point connected to a small circle rolling around a bigger circle.									
<b>CHANGE THESE TO ANY VALUE</b>									
<b>(POSITIVE, NEGATIVE, DECIMAL)</b>									
1	<--Major Radius								
-0.05	<--Minor radius (NON-ZERO). Positive tracks outside major circle. Negative tracks inside.								
0.6	<--Loop radius. Controls size of loops attached to small circle.								
90	<--Number of degrees figure rotated counterclockwise.								
0.5	<--Increase to add loops to an incomplete spiral or make jagged figure.								
	Decrease to make chart appear less jagged.								
	X	Y	X	Y					
theta	plot	plot	rotate	rotate					
0	1.550	0.000	0.000	1.550					
0.5	1.542	-0.091	0.091	1.542					
1	1.517	-0.179	0.179	1.517					
1.5	1.477	-0.261	0.261	1.477					
2	1.422	-0.336	0.336	1.422					
2.5	1.354	-0.401	0.401	1.354					
3	1.275	-0.453	0.453	1.275					
3.5	1.187	-0.492	0.492	1.187					
4	1.093	-0.516	0.516	1.093					
4.5	0.994	-0.524	0.524	0.994					
5	0.894	-0.515	0.515	0.894					
5.5	0.795	-0.490	0.490	0.795					
6	0.701	-0.449	0.449	0.701					
6.5	0.613	-0.393	0.393	0.613					
7	0.534	-0.323	0.323	0.534					
7.5	0.466	-0.241	0.241	0.466					
8	0.411	-0.149	0.149	0.411					
8.5	0.371	-0.050	0.050	0.371					
9	0.346	0.055	-0.055	0.346					
9.5	0.337	0.162	-0.162	0.337					
10	0.345	0.269	-0.269	0.345					
10.5	0.369	0.373	-0.373	0.369					
11	0.408	0.472	-0.472	0.408					
11.5	0.461	0.563	-0.563	0.461					

12	0.528	0.643	-0.643	0.528					
12.5	0.605	0.712	-0.712	0.605					
13	0.691	0.766	-0.766	0.691					
13.5	0.784	0.805	-0.805	0.784					
14	0.880	0.828	-0.828	0.880					
14.5	0.977	0.835	-0.835	0.977					
15	1.073	0.825	-0.825	1.073					
15.5	1.164	0.800	-0.800	1.164					
16	1.249	0.759	-0.759	1.249					
16.5	1.324	0.705	-0.705	1.324					
17	1.388	0.639	-0.639	1.388					
17.5	1.438	0.563	-0.563	1.438					
18	1.474	0.479	-0.479	1.474					
18.5	1.494	0.390	-0.390	1.494					
19	1.498	0.299	-0.299	1.498					
19.5	1.485	0.208	-0.208	1.485					
20	1.457	0.120	-0.120	1.457					
20.5	1.412	0.037	-0.037	1.412					
21	1.353	-0.037	0.037	1.353					
21.5	1.281	-0.101	0.101	1.281					
22	1.199	-0.153	0.153	1.199					
22.5	1.107	-0.191	0.191	1.107					
23	1.009	-0.213	0.213	1.009					
23.5	0.908	-0.220	0.220	0.908					
24	0.805	-0.210	0.210	0.805					
24.5	0.704	-0.184	0.184	0.704					
25	0.607	-0.142	0.142	0.607					
25.5	0.518	-0.085	0.085	0.518					
26	0.437	-0.015	0.015	0.437					
26.5	0.368	0.067	-0.067	0.368					
27	0.312	0.159	-0.159	0.312					
27.5	0.270	0.258	-0.258	0.270					
28	0.245	0.362	-0.362	0.245					
28.5	0.235	0.469	-0.469	0.235					
29	0.242	0.575	-0.575	0.242					
29.5	0.265	0.678	-0.678	0.265					
30	0.303	0.775	-0.775	0.303					
30.5	0.356	0.864	-0.864	0.356					
31	0.421	0.942	-0.942	0.421					
31.5	0.497	1.008	-1.008	0.497					
32	0.581	1.060	-1.060	0.581					
32.5	0.671	1.096	-1.096	0.671					
33	0.765	1.117	-1.117	0.765					
33.5	0.860	1.120	-1.120	0.860					

34	0.953	1.108	-1.108	0.953					
34.5	1.041	1.080	-1.080	1.041					
35	1.122	1.036	-1.036	1.122					
35.5	1.194	0.980	-0.980	1.194					
36	1.254	0.911	-0.911	1.254					
36.5	1.301	0.833	-0.833	1.301					
37	1.332	0.747	-0.747	1.332					
37.5	1.349	0.657	-0.657	1.349					
38	1.348	0.564	-0.564	1.348					
38.5	1.331	0.472	-0.472	1.331					
39	1.298	0.383	-0.383	1.298					
39.5	1.250	0.300	-0.300	1.250					
40	1.187	0.225	-0.225	1.187					
40.5	1.112	0.161	-0.161	1.112					
41	1.026	0.109	-0.109	1.026					
41.5	0.931	0.071	-0.071	0.931					
42	0.831	0.049	-0.049	0.831					
42.5	0.727	0.042	-0.042	0.727					
43	0.622	0.052	-0.052	0.622					
43.5	0.519	0.079	-0.079	0.519					
44	0.420	0.121	-0.121	0.420					
44.5	0.329	0.177	-0.177	0.329					
45	0.247	0.247	-0.247	0.247					
45.5	0.177	0.329	-0.329	0.177					
46	0.121	0.420	-0.420	0.121					
46.5	0.079	0.519	-0.519	0.079					
47	0.052	0.622	-0.622	0.052					
47.5	0.042	0.727	-0.727	0.042					
48	0.049	0.831	-0.831	0.049					
48.5	0.071	0.931	-0.931	0.071					
49	0.109	1.026	-1.026	0.109					
49.5	0.161	1.112	-1.112	0.161					
50	0.225	1.187	-1.187	0.225					
50.5	0.300	1.250	-1.250	0.300					
51	0.383	1.298	-1.298	0.383					
51.5	0.472	1.331	-1.331	0.472					
52	0.564	1.348	-1.348	0.564					
52.5	0.657	1.349	-1.349	0.657					
53	0.747	1.332	-1.332	0.747					
53.5	0.833	1.301	-1.301	0.833					
54	0.911	1.254	-1.254	0.911					
54.5	0.980	1.194	-1.194	0.980					
55	1.036	1.122	-1.122	1.036					
55.5	1.080	1.041	-1.041	1.080					

56	1.108	0.953	-0.953	1.108					
56.5	1.120	0.860	-0.860	1.120					
57	1.117	0.765	-0.765	1.117					
57.5	1.096	0.671	-0.671	1.096					
58	1.060	0.581	-0.581	1.060					
58.5	1.008	0.497	-0.497	1.008					
59	0.942	0.421	-0.421	0.942					
59.5	0.864	0.356	-0.356	0.864					
60	0.775	0.303	-0.303	0.775					
60.5	0.678	0.265	-0.265	0.678					
61	0.575	0.242	-0.242	0.575					
61.5	0.469	0.235	-0.235	0.469					
62	0.362	0.245	-0.245	0.362					
62.5	0.258	0.270	-0.270	0.258					
63	0.159	0.312	-0.312	0.159					
63.5	0.067	0.368	-0.368	0.067					
64	-0.015	0.437	-0.437	-0.015					
64.5	-0.085	0.518	-0.518	-0.085					
65	-0.142	0.607	-0.607	-0.142					
65.5	-0.184	0.704	-0.704	-0.184					
66	-0.210	0.805	-0.805	-0.210					
66.5	-0.220	0.908	-0.908	-0.220					
67	-0.213	1.009	-1.009	-0.213					
67.5	-0.191	1.107	-1.107	-0.191					
68	-0.153	1.199	-1.199	-0.153					
68.5	-0.101	1.281	-1.281	-0.101					
69	-0.037	1.353	-1.353	-0.037					
69.5	0.037	1.412	-1.412	0.037					
70	0.120	1.457	-1.457	0.120					
70.5	0.208	1.485	-1.485	0.208					
71	0.299	1.498	-1.498	0.299					
71.5	0.390	1.494	-1.494	0.390					
72	0.479	1.474	-1.474	0.479					
72.5	0.563	1.438	-1.438	0.563					
73	0.639	1.388	-1.388	0.639					
73.5	0.705	1.324	-1.324	0.705					
74	0.759	1.249	-1.249	0.759					
74.5	0.800	1.164	-1.164	0.800					
75	0.825	1.073	-1.073	0.825					
75.5	0.835	0.977	-0.977	0.835					
76	0.828	0.880	-0.880	0.828					
76.5	0.805	0.784	-0.784	0.805					
77	0.766	0.691	-0.691	0.766					
77.5	0.712	0.605	-0.605	0.712					

78	0.643	0.528	-0.528	0.643					
78.5	0.563	0.461	-0.461	0.563					
79	0.472	0.408	-0.408	0.472					
79.5	0.373	0.369	-0.369	0.373					
80	0.269	0.345	-0.345	0.269					
80.5	0.162	0.337	-0.337	0.162					
81	0.055	0.346	-0.346	0.055					
81.5	-0.050	0.371	-0.371	-0.050					
82	-0.149	0.411	-0.411	-0.149					
82.5	-0.241	0.466	-0.466	-0.241					
83	-0.323	0.534	-0.534	-0.323					
83.5	-0.393	0.613	-0.613	-0.393					
84	-0.449	0.701	-0.701	-0.449					
84.5	-0.490	0.795	-0.795	-0.490					
85	-0.515	0.894	-0.894	-0.515					
85.5	-0.524	0.994	-0.994	-0.524					
86	-0.516	1.093	-1.093	-0.516					
86.5	-0.492	1.187	-1.187	-0.492					
87	-0.453	1.275	-1.275	-0.453					
87.5	-0.401	1.354	-1.354	-0.401					
88	-0.336	1.422	-1.422	-0.336					
88.5	-0.261	1.477	-1.477	-0.261					
89	-0.179	1.517	-1.517	-0.179					
89.5	-0.091	1.542	-1.542	-0.091					
90	0.000	1.550	-1.550	0.000					
90.5	0.091	1.542	-1.542	0.091					
91	0.179	1.517	-1.517	0.179					
91.5	0.261	1.477	-1.477	0.261					
92	0.336	1.422	-1.422	0.336					
92.5	0.401	1.354	-1.354	0.401					
93	0.453	1.275	-1.275	0.453					
93.5	0.492	1.187	-1.187	0.492					
94	0.516	1.093	-1.093	0.516					
94.5	0.524	0.994	-0.994	0.524					
95	0.515	0.894	-0.894	0.515					
95.5	0.490	0.795	-0.795	0.490					
96	0.449	0.701	-0.701	0.449					
96.5	0.393	0.613	-0.613	0.393					
97	0.323	0.534	-0.534	0.323					
97.5	0.241	0.466	-0.466	0.241					
98	0.149	0.411	-0.411	0.149					
98.5	0.050	0.371	-0.371	0.050					
99	-0.055	0.346	-0.346	-0.055					
99.5	-0.162	0.337	-0.337	-0.162					

100	-0.269	0.345	-0.345	-0.269					
100.5	-0.373	0.369	-0.369	-0.373					
101	-0.472	0.408	-0.408	-0.472					
101.5	-0.563	0.461	-0.461	-0.563					
102	-0.643	0.528	-0.528	-0.643					
102.5	-0.712	0.605	-0.605	-0.712					
103	-0.766	0.691	-0.691	-0.766					
103.5	-0.805	0.784	-0.784	-0.805					
104	-0.828	0.880	-0.880	-0.828					
104.5	-0.835	0.977	-0.977	-0.835					
105	-0.825	1.073	-1.073	-0.825					
105.5	-0.800	1.164	-1.164	-0.800					
106	-0.759	1.249	-1.249	-0.759					
106.5	-0.705	1.324	-1.324	-0.705					
107	-0.639	1.388	-1.388	-0.639					
107.5	-0.563	1.438	-1.438	-0.563					
108	-0.479	1.474	-1.474	-0.479					
108.5	-0.390	1.494	-1.494	-0.390					
109	-0.299	1.498	-1.498	-0.299					
109.5	-0.208	1.485	-1.485	-0.208					
110	-0.120	1.457	-1.457	-0.120					
110.5	-0.037	1.412	-1.412	-0.037					
111	0.037	1.353	-1.353	0.037					
111.5	0.101	1.281	-1.281	0.101					
112	0.153	1.199	-1.199	0.153					
112.5	0.191	1.107	-1.107	0.191					
113	0.213	1.009	-1.009	0.213					
113.5	0.220	0.908	-0.908	0.220					
114	0.210	0.805	-0.805	0.210					
114.5	0.184	0.704	-0.704	0.184					
115	0.142	0.607	-0.607	0.142					
115.5	0.085	0.518	-0.518	0.085					
116	0.015	0.437	-0.437	0.015					
116.5	-0.067	0.368	-0.368	-0.067					
117	-0.159	0.312	-0.312	-0.159					
117.5	-0.258	0.270	-0.270	-0.258					
118	-0.362	0.245	-0.245	-0.362					
118.5	-0.469	0.235	-0.235	-0.469					
119	-0.575	0.242	-0.242	-0.575					
119.5	-0.678	0.265	-0.265	-0.678					
120	-0.775	0.303	-0.303	-0.775					
120.5	-0.864	0.356	-0.356	-0.864					
121	-0.942	0.421	-0.421	-0.942					
121.5	-1.008	0.497	-0.497	-1.008					

122	-1.060	0.581	-0.581	-1.060					
122.5	-1.096	0.671	-0.671	-1.096					
123	-1.117	0.765	-0.765	-1.117					
123.5	-1.120	0.860	-0.860	-1.120					
124	-1.108	0.953	-0.953	-1.108					
124.5	-1.080	1.041	-1.041	-1.080					
125	-1.036	1.122	-1.122	-1.036					
125.5	-0.980	1.194	-1.194	-0.980					
126	-0.911	1.254	-1.254	-0.911					
126.5	-0.833	1.301	-1.301	-0.833					
127	-0.747	1.332	-1.332	-0.747					
127.5	-0.657	1.349	-1.349	-0.657					
128	-0.564	1.348	-1.348	-0.564					
128.5	-0.472	1.331	-1.331	-0.472					
129	-0.383	1.298	-1.298	-0.383					
129.5	-0.300	1.250	-1.250	-0.300					
130	-0.225	1.187	-1.187	-0.225					
130.5	-0.161	1.112	-1.112	-0.161					
131	-0.109	1.026	-1.026	-0.109					
131.5	-0.071	0.931	-0.931	-0.071					
132	-0.049	0.831	-0.831	-0.049					
132.5	-0.042	0.727	-0.727	-0.042					
133	-0.052	0.622	-0.622	-0.052					
133.5	-0.079	0.519	-0.519	-0.079					
134	-0.121	0.420	-0.420	-0.121					
134.5	-0.177	0.329	-0.329	-0.177					
135	-0.247	0.247	-0.247	-0.247					
135.5	-0.329	0.177	-0.177	-0.329					
136	-0.420	0.121	-0.121	-0.420					
136.5	-0.519	0.079	-0.079	-0.519					
137	-0.622	0.052	-0.052	-0.622					
137.5	-0.727	0.042	-0.042	-0.727					
138	-0.831	0.049	-0.049	-0.831					
138.5	-0.931	0.071	-0.071	-0.931					
139	-1.026	0.109	-0.109	-1.026					
139.5	-1.112	0.161	-0.161	-1.112					
140	-1.187	0.225	-0.225	-1.187					
140.5	-1.250	0.300	-0.300	-1.250					
141	-1.298	0.383	-0.383	-1.298					
141.5	-1.331	0.472	-0.472	-1.331					
142	-1.348	0.564	-0.564	-1.348					
142.5	-1.349	0.657	-0.657	-1.349					
143	-1.332	0.747	-0.747	-1.332					
143.5	-1.301	0.833	-0.833	-1.301					

144	-1.254	0.911	-0.911	-1.254					
144.5	-1.194	0.980	-0.980	-1.194					
145	-1.122	1.036	-1.036	-1.122					
145.5	-1.041	1.080	-1.080	-1.041					
146	-0.953	1.108	-1.108	-0.953					
146.5	-0.860	1.120	-1.120	-0.860					
147	-0.765	1.117	-1.117	-0.765					
147.5	-0.671	1.096	-1.096	-0.671					
148	-0.581	1.060	-1.060	-0.581					
148.5	-0.497	1.008	-1.008	-0.497					
149	-0.421	0.942	-0.942	-0.421					
149.5	-0.356	0.864	-0.864	-0.356					
150	-0.303	0.775	-0.775	-0.303					
150.5	-0.265	0.678	-0.678	-0.265					
151	-0.242	0.575	-0.575	-0.242					
151.5	-0.235	0.469	-0.469	-0.235					
152	-0.245	0.362	-0.362	-0.245					
152.5	-0.270	0.258	-0.258	-0.270					
153	-0.312	0.159	-0.159	-0.312					
153.5	-0.368	0.067	-0.067	-0.368					
154	-0.437	-0.015	0.015	-0.437					
154.5	-0.518	-0.085	0.085	-0.518					
155	-0.607	-0.142	0.142	-0.607					
155.5	-0.704	-0.184	0.184	-0.704					
156	-0.805	-0.210	0.210	-0.805					
156.5	-0.908	-0.220	0.220	-0.908					
157	-1.009	-0.213	0.213	-1.009					
157.5	-1.107	-0.191	0.191	-1.107					
158	-1.199	-0.153	0.153	-1.199					
158.5	-1.281	-0.101	0.101	-1.281					
159	-1.353	-0.037	0.037	-1.353					
159.5	-1.412	0.037	-0.037	-1.412					
160	-1.457	0.120	-0.120	-1.457					
160.5	-1.485	0.208	-0.208	-1.485					
161	-1.498	0.299	-0.299	-1.498					
161.5	-1.494	0.390	-0.390	-1.494					
162	-1.474	0.479	-0.479	-1.474					
162.5	-1.438	0.563	-0.563	-1.438					
163	-1.388	0.639	-0.639	-1.388					
163.5	-1.324	0.705	-0.705	-1.324					
164	-1.249	0.759	-0.759	-1.249					
164.5	-1.164	0.800	-0.800	-1.164					
165	-1.073	0.825	-0.825	-1.073					
165.5	-0.977	0.835	-0.835	-0.977					



166	-0.880	0.828	-0.828	-0.880					
166.5	-0.784	0.805	-0.805	-0.784					
167	-0.691	0.766	-0.766	-0.691					
167.5	-0.605	0.712	-0.712	-0.605					
168	-0.528	0.643	-0.643	-0.528					
168.5	-0.461	0.563	-0.563	-0.461					
169	-0.408	0.472	-0.472	-0.408					
169.5	-0.369	0.373	-0.373	-0.369					
170	-0.345	0.269	-0.269	-0.345					
170.5	-0.337	0.162	-0.162	-0.337					
171	-0.346	0.055	-0.055	-0.346					
171.5	-0.371	-0.050	0.050	-0.371					
172	-0.411	-0.149	0.149	-0.411					
172.5	-0.466	-0.241	0.241	-0.466					
173	-0.534	-0.323	0.323	-0.534					
173.5	-0.613	-0.393	0.393	-0.613					
174	-0.701	-0.449	0.449	-0.701					
174.5	-0.795	-0.490	0.490	-0.795					
175	-0.894	-0.515	0.515	-0.894					
175.5	-0.994	-0.524	0.524	-0.994					
176	-1.093	-0.516	0.516	-1.093					
176.5	-1.187	-0.492	0.492	-1.187					
177	-1.275	-0.453	0.453	-1.275					
177.5	-1.354	-0.401	0.401	-1.354					
178	-1.422	-0.336	0.336	-1.422					
178.5	-1.477	-0.261	0.261	-1.477					
179	-1.517	-0.179	0.179	-1.517					
179.5	-1.542	-0.091	0.091	-1.542					
180	-1.550	0.000	0.000	-1.550					
180.5	-1.542	0.091	-0.091	-1.542					
181	-1.517	0.179	-0.179	-1.517					
181.5	-1.477	0.261	-0.261	-1.477					
182	-1.422	0.336	-0.336	-1.422					
182.5	-1.354	0.401	-0.401	-1.354					
183	-1.275	0.453	-0.453	-1.275					
183.5	-1.187	0.492	-0.492	-1.187					
184	-1.093	0.516	-0.516	-1.093					
184.5	-0.994	0.524	-0.524	-0.994					
185	-0.894	0.515	-0.515	-0.894					
185.5	-0.795	0.490	-0.490	-0.795					
186	-0.701	0.449	-0.449	-0.701					
186.5	-0.613	0.393	-0.393	-0.613					
187	-0.534	0.323	-0.323	-0.534					
187.5	-0.466	0.241	-0.241	-0.466					

188	-0.411	0.149	-0.149	-0.411					
188.5	-0.371	0.050	-0.050	-0.371					
189	-0.346	-0.055	0.055	-0.346					
189.5	-0.337	-0.162	0.162	-0.337					
190	-0.345	-0.269	0.269	-0.345					
190.5	-0.369	-0.373	0.373	-0.369					
191	-0.408	-0.472	0.472	-0.408					
191.5	-0.461	-0.563	0.563	-0.461					
192	-0.528	-0.643	0.643	-0.528					
192.5	-0.605	-0.712	0.712	-0.605					
193	-0.691	-0.766	0.766	-0.691					
193.5	-0.784	-0.805	0.805	-0.784					
194	-0.880	-0.828	0.828	-0.880					
194.5	-0.977	-0.835	0.835	-0.977					
195	-1.073	-0.825	0.825	-1.073					
195.5	-1.164	-0.800	0.800	-1.164					
196	-1.249	-0.759	0.759	-1.249					
196.5	-1.324	-0.705	0.705	-1.324					
197	-1.388	-0.639	0.639	-1.388					
197.5	-1.438	-0.563	0.563	-1.438					
198	-1.474	-0.479	0.479	-1.474					
198.5	-1.494	-0.390	0.390	-1.494					
199	-1.498	-0.299	0.299	-1.498					
199.5	-1.485	-0.208	0.208	-1.485					
200	-1.457	-0.120	0.120	-1.457					
200.5	-1.412	-0.037	0.037	-1.412					
201	-1.353	0.037	-0.037	-1.353					
201.5	-1.281	0.101	-0.101	-1.281					
202	-1.199	0.153	-0.153	-1.199					
202.5	-1.107	0.191	-0.191	-1.107					
203	-1.009	0.213	-0.213	-1.009					
203.5	-0.908	0.220	-0.220	-0.908					
204	-0.805	0.210	-0.210	-0.805					
204.5	-0.704	0.184	-0.184	-0.704					
205	-0.607	0.142	-0.142	-0.607					
205.5	-0.518	0.085	-0.085	-0.518					
206	-0.437	0.015	-0.015	-0.437					
206.5	-0.368	-0.067	0.067	-0.368					
207	-0.312	-0.159	0.159	-0.312					
207.5	-0.270	-0.258	0.258	-0.270					
208	-0.245	-0.362	0.362	-0.245					
208.5	-0.235	-0.469	0.469	-0.235					
209	-0.242	-0.575	0.575	-0.242					
209.5	-0.265	-0.678	0.678	-0.265					

210	-0.303	-0.775	0.775	-0.303					
210.5	-0.356	-0.864	0.864	-0.356					
211	-0.421	-0.942	0.942	-0.421					
211.5	-0.497	-1.008	1.008	-0.497					
212	-0.581	-1.060	1.060	-0.581					
212.5	-0.671	-1.096	1.096	-0.671					
213	-0.765	-1.117	1.117	-0.765					
213.5	-0.860	-1.120	1.120	-0.860					
214	-0.953	-1.108	1.108	-0.953					
214.5	-1.041	-1.080	1.080	-1.041					
215	-1.122	-1.036	1.036	-1.122					
215.5	-1.194	-0.980	0.980	-1.194					
216	-1.254	-0.911	0.911	-1.254					
216.5	-1.301	-0.833	0.833	-1.301					
217	-1.332	-0.747	0.747	-1.332					
217.5	-1.349	-0.657	0.657	-1.349					
218	-1.348	-0.564	0.564	-1.348					
218.5	-1.331	-0.472	0.472	-1.331					
219	-1.298	-0.383	0.383	-1.298					
219.5	-1.250	-0.300	0.300	-1.250					
220	-1.187	-0.225	0.225	-1.187					
220.5	-1.112	-0.161	0.161	-1.112					
221	-1.026	-0.109	0.109	-1.026					
221.5	-0.931	-0.071	0.071	-0.931					
222	-0.831	-0.049	0.049	-0.831					
222.5	-0.727	-0.042	0.042	-0.727					
223	-0.622	-0.052	0.052	-0.622					
223.5	-0.519	-0.079	0.079	-0.519					
224	-0.420	-0.121	0.121	-0.420					
224.5	-0.329	-0.177	0.177	-0.329					
225	-0.247	-0.247	0.247	-0.247					
225.5	-0.177	-0.329	0.329	-0.177					
226	-0.121	-0.420	0.420	-0.121					
226.5	-0.079	-0.519	0.519	-0.079					
227	-0.052	-0.622	0.622	-0.052					
227.5	-0.042	-0.727	0.727	-0.042					
228	-0.049	-0.831	0.831	-0.049					
228.5	-0.071	-0.931	0.931	-0.071					
229	-0.109	-1.026	1.026	-0.109					
229.5	-0.161	-1.112	1.112	-0.161					
230	-0.225	-1.187	1.187	-0.225					
230.5	-0.300	-1.250	1.250	-0.300					
231	-0.383	-1.298	1.298	-0.383					
231.5	-0.472	-1.331	1.331	-0.472					

232	-0.564	-1.348	1.348	-0.564					
232.5	-0.657	-1.349	1.349	-0.657					
233	-0.747	-1.332	1.332	-0.747					
233.5	-0.833	-1.301	1.301	-0.833					
234	-0.911	-1.254	1.254	-0.911					
234.5	-0.980	-1.194	1.194	-0.980					
235	-1.036	-1.122	1.122	-1.036					
235.5	-1.080	-1.041	1.041	-1.080					
236	-1.108	-0.953	0.953	-1.108					
236.5	-1.120	-0.860	0.860	-1.120					
237	-1.117	-0.765	0.765	-1.117					
237.5	-1.096	-0.671	0.671	-1.096					
238	-1.060	-0.581	0.581	-1.060					
238.5	-1.008	-0.497	0.497	-1.008					
239	-0.942	-0.421	0.421	-0.942					
239.5	-0.864	-0.356	0.356	-0.864					
240	-0.775	-0.303	0.303	-0.775					
240.5	-0.678	-0.265	0.265	-0.678					
241	-0.575	-0.242	0.242	-0.575					
241.5	-0.469	-0.235	0.235	-0.469					
242	-0.362	-0.245	0.245	-0.362					
242.5	-0.258	-0.270	0.270	-0.258					
243	-0.159	-0.312	0.312	-0.159					
243.5	-0.067	-0.368	0.368	-0.067					
244	0.015	-0.437	0.437	0.015					
244.5	0.085	-0.518	0.518	0.085					
245	0.142	-0.607	0.607	0.142					
245.5	0.184	-0.704	0.704	0.184					
246	0.210	-0.805	0.805	0.210					
246.5	0.220	-0.908	0.908	0.220					
247	0.213	-1.009	1.009	0.213					
247.5	0.191	-1.107	1.107	0.191					
248	0.153	-1.199	1.199	0.153					
248.5	0.101	-1.281	1.281	0.101					
249	0.037	-1.353	1.353	0.037					
249.5	-0.037	-1.412	1.412	-0.037					
250	-0.120	-1.457	1.457	-0.120					
250.5	-0.208	-1.485	1.485	-0.208					
251	-0.299	-1.498	1.498	-0.299					
251.5	-0.390	-1.494	1.494	-0.390					
252	-0.479	-1.474	1.474	-0.479					
252.5	-0.563	-1.438	1.438	-0.563					
253	-0.639	-1.388	1.388	-0.639					
253.5	-0.705	-1.324	1.324	-0.705					

254	-0.759	-1.249	1.249	-0.759					
254.5	-0.800	-1.164	1.164	-0.800					
255	-0.825	-1.073	1.073	-0.825					
255.5	-0.835	-0.977	0.977	-0.835					
256	-0.828	-0.880	0.880	-0.828					
256.5	-0.805	-0.784	0.784	-0.805					
257	-0.766	-0.691	0.691	-0.766					
257.5	-0.712	-0.605	0.605	-0.712					
258	-0.643	-0.528	0.528	-0.643					
258.5	-0.563	-0.461	0.461	-0.563					
259	-0.472	-0.408	0.408	-0.472					
259.5	-0.373	-0.369	0.369	-0.373					
260	-0.269	-0.345	0.345	-0.269					
260.5	-0.162	-0.337	0.337	-0.162					
261	-0.055	-0.346	0.346	-0.055					
261.5	0.050	-0.371	0.371	0.050					
262	0.149	-0.411	0.411	0.149					
262.5	0.241	-0.466	0.466	0.241					
263	0.323	-0.534	0.534	0.323					
263.5	0.393	-0.613	0.613	0.393					
264	0.449	-0.701	0.701	0.449					
264.5	0.490	-0.795	0.795	0.490					
265	0.515	-0.894	0.894	0.515					
265.5	0.524	-0.994	0.994	0.524					
266	0.516	-1.093	1.093	0.516					
266.5	0.492	-1.187	1.187	0.492					
267	0.453	-1.275	1.275	0.453					
267.5	0.401	-1.354	1.354	0.401					
268	0.336	-1.422	1.422	0.336					
268.5	0.261	-1.477	1.477	0.261					
269	0.179	-1.517	1.517	0.179					
269.5	0.091	-1.542	1.542	0.091					
270	0.000	-1.550	1.550	0.000					
270.5	-0.091	-1.542	1.542	-0.091					
271	-0.179	-1.517	1.517	-0.179					
271.5	-0.261	-1.477	1.477	-0.261					
272	-0.336	-1.422	1.422	-0.336					
272.5	-0.401	-1.354	1.354	-0.401					
273	-0.453	-1.275	1.275	-0.453					
273.5	-0.492	-1.187	1.187	-0.492					
274	-0.516	-1.093	1.093	-0.516					
274.5	-0.524	-0.994	0.994	-0.524					
275	-0.515	-0.894	0.894	-0.515					
275.5	-0.490	-0.795	0.795	-0.490					

276	-0.449	-0.701	0.701	-0.449					
276.5	-0.393	-0.613	0.613	-0.393					
277	-0.323	-0.534	0.534	-0.323					
277.5	-0.241	-0.466	0.466	-0.241					
278	-0.149	-0.411	0.411	-0.149					
278.5	-0.050	-0.371	0.371	-0.050					
279	0.055	-0.346	0.346	0.055					
279.5	0.162	-0.337	0.337	0.162					
280	0.269	-0.345	0.345	0.269					
280.5	0.373	-0.369	0.369	0.373					
281	0.472	-0.408	0.408	0.472					
281.5	0.563	-0.461	0.461	0.563					
282	0.643	-0.528	0.528	0.643					
282.5	0.712	-0.605	0.605	0.712					
283	0.766	-0.691	0.691	0.766					
283.5	0.805	-0.784	0.784	0.805					
284	0.828	-0.880	0.880	0.828					
284.5	0.835	-0.977	0.977	0.835					
285	0.825	-1.073	1.073	0.825					
285.5	0.800	-1.164	1.164	0.800					
286	0.759	-1.249	1.249	0.759					
286.5	0.705	-1.324	1.324	0.705					
287	0.639	-1.388	1.388	0.639					
287.5	0.563	-1.438	1.438	0.563					
288	0.479	-1.474	1.474	0.479					
288.5	0.390	-1.494	1.494	0.390					
289	0.299	-1.498	1.498	0.299					
289.5	0.208	-1.485	1.485	0.208					
290	0.120	-1.457	1.457	0.120					
290.5	0.037	-1.412	1.412	0.037					
291	-0.037	-1.353	1.353	-0.037					
291.5	-0.101	-1.281	1.281	-0.101					
292	-0.153	-1.199	1.199	-0.153					
292.5	-0.191	-1.107	1.107	-0.191					
293	-0.213	-1.009	1.009	-0.213					
293.5	-0.220	-0.908	0.908	-0.220					
294	-0.210	-0.805	0.805	-0.210					
294.5	-0.184	-0.704	0.704	-0.184					
295	-0.142	-0.607	0.607	-0.142					
295.5	-0.085	-0.518	0.518	-0.085					
296	-0.015	-0.437	0.437	-0.015					
296.5	0.067	-0.368	0.368	0.067					
297	0.159	-0.312	0.312	0.159					
297.5	0.258	-0.270	0.270	0.258					

298	0.362	-0.245	0.245	0.362					
298.5	0.469	-0.235	0.235	0.469					
299	0.575	-0.242	0.242	0.575					
299.5	0.678	-0.265	0.265	0.678					
300	0.775	-0.303	0.303	0.775					
300.5	0.864	-0.356	0.356	0.864					
301	0.942	-0.421	0.421	0.942					
301.5	1.008	-0.497	0.497	1.008					
302	1.060	-0.581	0.581	1.060					
302.5	1.096	-0.671	0.671	1.096					
303	1.117	-0.765	0.765	1.117					
303.5	1.120	-0.860	0.860	1.120					
304	1.108	-0.953	0.953	1.108					
304.5	1.080	-1.041	1.041	1.080					
305	1.036	-1.122	1.122	1.036					
305.5	0.980	-1.194	1.194	0.980					
306	0.911	-1.254	1.254	0.911					
306.5	0.833	-1.301	1.301	0.833					
307	0.747	-1.332	1.332	0.747					
307.5	0.657	-1.349	1.349	0.657					
308	0.564	-1.348	1.348	0.564					
308.5	0.472	-1.331	1.331	0.472					
309	0.383	-1.298	1.298	0.383					
309.5	0.300	-1.250	1.250	0.300					
310	0.225	-1.187	1.187	0.225					
310.5	0.161	-1.112	1.112	0.161					
311	0.109	-1.026	1.026	0.109					
311.5	0.071	-0.931	0.931	0.071					
312	0.049	-0.831	0.831	0.049					
312.5	0.042	-0.727	0.727	0.042					
313	0.052	-0.622	0.622	0.052					
313.5	0.079	-0.519	0.519	0.079					
314	0.121	-0.420	0.420	0.121					
314.5	0.177	-0.329	0.329	0.177					
315	0.247	-0.247	0.247	0.247					
315.5	0.329	-0.177	0.177	0.329					
316	0.420	-0.121	0.121	0.420					
316.5	0.519	-0.079	0.079	0.519					
317	0.622	-0.052	0.052	0.622					
317.5	0.727	-0.042	0.042	0.727					
318	0.831	-0.049	0.049	0.831					
318.5	0.931	-0.071	0.071	0.931					
319	1.026	-0.109	0.109	1.026					
319.5	1.112	-0.161	0.161	1.112					

320	1.187	-0.225	0.225	1.187					
320.5	1.250	-0.300	0.300	1.250					
321	1.298	-0.383	0.383	1.298					
321.5	1.331	-0.472	0.472	1.331					
322	1.348	-0.564	0.564	1.348					
322.5	1.349	-0.657	0.657	1.349					
323	1.332	-0.747	0.747	1.332					
323.5	1.301	-0.833	0.833	1.301					
324	1.254	-0.911	0.911	1.254					
324.5	1.194	-0.980	0.980	1.194					
325	1.122	-1.036	1.036	1.122					
325.5	1.041	-1.080	1.080	1.041					
326	0.953	-1.108	1.108	0.953					
326.5	0.860	-1.120	1.120	0.860					
327	0.765	-1.117	1.117	0.765					
327.5	0.671	-1.096	1.096	0.671					
328	0.581	-1.060	1.060	0.581					
328.5	0.497	-1.008	1.008	0.497					
329	0.421	-0.942	0.942	0.421					
329.5	0.356	-0.864	0.864	0.356					
330	0.303	-0.775	0.775	0.303					
330.5	0.265	-0.678	0.678	0.265					
331	0.242	-0.575	0.575	0.242					
331.5	0.235	-0.469	0.469	0.235					
332	0.245	-0.362	0.362	0.245					
332.5	0.270	-0.258	0.258	0.270					
333	0.312	-0.159	0.159	0.312					
333.5	0.368	-0.067	0.067	0.368					
334	0.437	0.015	-0.015	0.437					
334.5	0.518	0.085	-0.085	0.518					
335	0.607	0.142	-0.142	0.607					
335.5	0.704	0.184	-0.184	0.704					
336	0.805	0.210	-0.210	0.805					
336.5	0.908	0.220	-0.220	0.908					
337	1.009	0.213	-0.213	1.009					
337.5	1.107	0.191	-0.191	1.107					
338	1.199	0.153	-0.153	1.199					
338.5	1.281	0.101	-0.101	1.281					
339	1.353	0.037	-0.037	1.353					
339.5	1.412	-0.037	0.037	1.412					
340	1.457	-0.120	0.120	1.457					
340.5	1.485	-0.208	0.208	1.485					
341	1.498	-0.299	0.299	1.498					
341.5	1.494	-0.390	0.390	1.494					



342	1.474	-0.479	0.479	1.474					
342.5	1.438	-0.563	0.563	1.438					
343	1.388	-0.639	0.639	1.388					
343.5	1.324	-0.705	0.705	1.324					
344	1.249	-0.759	0.759	1.249					
344.5	1.164	-0.800	0.800	1.164					
345	1.073	-0.825	0.825	1.073					
345.5	0.977	-0.835	0.835	0.977					
346	0.880	-0.828	0.828	0.880					
346.5	0.784	-0.805	0.805	0.784					
347	0.691	-0.766	0.766	0.691					
347.5	0.605	-0.712	0.712	0.605					
348	0.528	-0.643	0.643	0.528					
348.5	0.461	-0.563	0.563	0.461					
349	0.408	-0.472	0.472	0.408					
349.5	0.369	-0.373	0.373	0.369					
350	0.345	-0.269	0.269	0.345					
350.5	0.337	-0.162	0.162	0.337					
351	0.346	-0.055	0.055	0.346					
351.5	0.371	0.050	-0.050	0.371					
352	0.411	0.149	-0.149	0.411					
352.5	0.466	0.241	-0.241	0.466					
353	0.534	0.323	-0.323	0.534					
353.5	0.613	0.393	-0.393	0.613					
354	0.701	0.449	-0.449	0.701					
354.5	0.795	0.490	-0.490	0.795					
355	0.894	0.515	-0.515	0.894					
355.5	0.994	0.524	-0.524	0.994					
356	1.093	0.516	-0.516	1.093					
356.5	1.187	0.492	-0.492	1.187					
357	1.275	0.453	-0.453	1.275					
357.5	1.354	0.401	-0.401	1.354					
358	1.422	0.336	-0.336	1.422					
358.5	1.477	0.261	-0.261	1.477					
359	1.517	0.179	-0.179	1.517					
359.5	1.542	0.091	-0.091	1.542					
360	1.550	0.000	0.000	1.550					