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Example 10: A Bombing Mission, page 68, Chapter 02

Consider a bomber attempting to destroy an ammunition depot. (This bomber has conventional rather than laser-guided weapons). If a bomb falls anywhere inside the target, a hit is scored; otherwise, the bomb is a miss. (Note that when a bomb appears appears visually to have touched a boundary line, it may or may not have hit the target; the model determines mathematically whether a hit has occurred, using the (X,Y) coordinates nd the equations of the piecewise-linear boundary of the depot.)

The bomber flies in the horizontal direction and carries 10 bombs. The aiming point is (0,0). The actual point of impact is assumed to be normally distributed around the aiming point with a standard deviation of 400 meters in the direction of flight and 200 meters in the perpendicular direction. The problem is to simulate the operation and estimate the number of bombs on target.

Recall that the standardized normal variate Z, having mean $\mu = 0$, and standard deviation $\sigma = 1$, is distributed as

$$Z = \frac{X - \mu}{\sigma}$$

Where X is a normal random variable, Then, with mean zero and standard deviations given by $\sigma_x = 400$ and $\sigma_y = 200$, we have

$$Z_x = \frac{X}{400}, Z_y = \frac{Y}{200}$$

Where (X,Y) are the simulated coordinates where the bomb hits.

Number of Hits	Number of Miss	No. of Trials	Probability of Hits	Probability of Misses	PDF
397	173	570	0.696	0.304	1

σ_x	=	400	X range: $X_{low} \leq X \leq X_{high}$, Y range: $Y_{low} \leq Y \leq Y_{high}$,
σ_y	=	200	

Z_x and Z_y
Random Normal Number,

X_{low}	=	-1300	0.161452531
X_{high}	=	1300	
Y_{low}	=	-200	
Y_{high}	=	200	

Bomb	Z_X	σ_X	X	Z_Y	σ_Y	Y	Hit Or Miss?
1	1.901115448	400	760.4461793	-1.01676639	200	-203.353278	Miss
2	1.015447646	400	406.1790583	-0.52915074	200	-105.830149	Hit
3	-0.36255138	400	-145.0205522	1.39821442	200	279.642884	Miss
4	-0.190844191	400	-76.33767629	-0.11162976	200	-22.3259517	Hit
5	0.722710799	400	289.0843197	-0.97101059	200	-194.202119	Hit
6	-1.420220703	400	-568.0882812	-1.09010413	200	-218.020825	Miss
7	-1.663329232	400	-665.3316927	0.57216002	200	114.432005	Hit
8	-1.165929489	400	-466.3717956	0.2979281	200	59.5856201	Hit
9	1.291369573	400	516.5478294	-1.35547064	200	-271.094127	Miss
10	0.532891938	400	213.1567751	-0.57101735	200	-114.20347	Hit
11	-0.794276275	400	-317.71051	-0.17772963	200	-35.5459257	Hit
12	-0.466300253	400	-186.5201013	-1.13866014	200	-227.732028	Miss
13	2.366532552	400	946.6130207	-0.23287979	200	-46.5759575	Hit
14	-1.304874244	400	-521.9496974	-0.70706596	200	-141.413191	Hit
15	0.878096332	400	351.2385326	1.13328529	200	226.657059	Miss
16	-1.735062876	400	-694.0251503	1.55642544	200	311.285088	Miss
17	-1.561195706	400	-624.4782824	-0.52948688	200	-105.897376	Hit
18	0.372145263	400	148.8581053	-1.02399742	200	-204.799484	Miss
19	-0.884098412	400	-353.6393647	1.02330851	200	204.661703	Miss
20	0.535865418	400	214.3461672	-0.98499692	200	-196.999384	Hit
21	-0.655158456	400	-262.0633824	0.51259807	200	102.519614	Hit
22	-2.035433134	400	-814.1732534	0.372719	200	74.5437991	Hit
23	-0.241664189	400	-96.66567569	1.40173845	200	280.34769	Miss
24	-0.152666786	400	-61.06671446	0.81152705	200	162.305411	Hit
25	0.035404271	400	14.16170827	0.04113569	200	8.22713892	Hit
26	0.039083487	400	15.63339484	-0.08909558	200	-17.8191163	Hit
27	-0.939023448	400	-375.6093792	-0.01851003	200	-3.70200512	Hit
28	0.74267846	400	297.0713838	-0.64474064	200	-128.948129	Hit
29	0.566812495	400	226.7249982	1.35184496	200	270.368992	Miss
30	0.458862717	400	183.5450869	0.60618429	200	121.236859	Hit
31	0.078653934	400	31.46157376	-2.2284881	200	-445.69762	Miss
32	-0.018023309	400	-7.209323422	-1.52903545	200	-305.80709	Miss
33	0.876480368	400	350.5921472	-0.33344605	200	-66.6892102	Hit
34	1.758295813	400	703.3183252	-0.69847434	200	-139.694869	Hit
35	1.287115758	400	514.8463033	-0.50952061	200	-101.904123	Hit
36	1.107390549	400	442.9562197	1.14052787	200	228.105574	Miss
37	-0.618114516	400	-247.2458062	-0.10075118	200	-20.1502363	Hit
38	0.056156883	400	22.46275316	-0.23455795	200	-46.9115907	Hit
39	0.507232804	400	202.8931216	0.62361473	200	124.722946	Hit
40	0.81131031	400	324.524124	-0.16223036	200	-32.4460726	Hit
41	-0.443971236	400	-177.5884946	0.88431138	200	176.862276	Hit
42	1.84139103	400	736.5564121	-0.43628029	200	-87.2560572	Hit
43	-0.241502119	400	-96.60084753	1.62439312	200	324.878623	Miss

44	0.73630034	400	294.5201361	-0.55027768	200	-110.055536	Hit
45	0.156758494	400	62.70339766	-3.54496868	200	-708.993736	Miss
46	-0.683706039	400	-273.4824154	-0.81029774	200	-162.059548	Hit
47	0.345590071	400	138.2360284	-0.76302575	200	-152.605151	Hit
48	1.959951965	400	783.980786	0.99134433	200	198.268865	Hit
49	0.553308303	400	221.3233211	0.49986217	200	99.972434	Hit
50	1.992257746	400	796.9030983	-0.19303162	200	-38.6063237	Hit
51	0.367794297	400	147.1177189	1.44718423	200	289.436846	Miss
52	0.580818362	400	232.3273449	-0.47130126	200	-94.2602523	Hit
53	-1.14280839	400	-457.1233558	-0.5395958	200	-107.91916	Hit
54	-0.113828449	400	-45.53137951	-1.40969163	200	-281.938326	Miss
55	-1.0321908	400	-412.8763202	-0.42201229	200	-84.402458	Hit
56	0.415602095	400	166.2408378	0.21894225	200	43.7884509	Hit
57	-2.255204585	400	-902.081834	0.45144534	200	90.2890683	Hit
58	0.190608829	400	76.24353178	-0.60273468	200	-120.546937	Hit
59	0.221637195	400	88.65487817	-1.148271	200	-229.6542	Miss
60	0.098360696	400	39.34427836	0.66769959	200	133.539918	Hit
61	0.092315813	400	36.92632505	-1.20573769	200	-241.147537	Miss
62	-1.488845978	400	-595.5383914	2.19856865	200	439.713729	Miss
63	0.577661879	400	231.0647517	2.16211958	200	432.423916	Miss
64	-0.47679752	400	-190.719008	1.43992441	200	287.984882	Miss
65	0.287765228	400	115.1060913	-0.73420057	200	-146.840114	Hit
66	-0.121825412	400	-48.73016498	0.25656525	200	51.313049	Hit
67	-0.963131133	400	-385.2524532	0.37731073	200	75.4621459	Hit
68	-0.771929276	400	-308.7717105	0.76224259	200	152.448519	Hit
69	0.539584576	400	215.8338303	-0.85124698	200	-170.249397	Hit
70	0.289108316	400	115.6433263	-1.87662019	200	-375.324038	Miss
71	-0.521366235	400	-208.5464939	0.45396378	200	90.7927564	Hit
72	-0.698691869	400	-279.4767476	-0.90230857	200	-180.461714	Hit
73	0.4607939	400	184.3175601	-0.65010884	200	-130.021768	Hit
74	-0.306076316	400	-122.4305265	-0.23376445	200	-46.75289	Hit
75	-0.407482387	400	-162.9929546	-0.35701585	200	-71.4031692	Hit
76	-0.070445664	400	-28.17826558	0.00514128	200	1.02825514	Hit
77	-0.919882493	400	-367.9529973	-0.99127068	200	-198.254137	Hit
78	0.459498069	400	183.7992277	0.80807428	200	161.614856	Hit
79	1.602464785	400	640.9859141	1.16324164	200	232.648327	Miss
80	-0.720595219	400	-288.2380878	-0.88885965	200	-177.77193	Hit
81	-2.338559991	400	-935.4239964	-0.69334623	200	-138.669247	Hit
82	-0.222146049	400	-88.8584194	0.71816147	200	143.632295	Hit
83	0.636783699	400	254.7134795	-0.11821494	200	-23.6429889	Hit
84	-1.437145264	400	-574.8581056	-2.38777993	200	-477.555987	Miss
85	1.890868206	400	756.3472824	1.32502856	200	265.005711	Miss
86	-0.188220509	400	-75.28820371	-0.55472308	200	-110.944616	Hit
87	1.018197851	400	407.2791406	-0.17433437	200	-34.8668738	Hit
88	-0.764181813	400	-305.6727251	2.22983458	200	445.966916	Miss
89	-0.359054322	400	-143.6217287	-1.65009865	200	-330.01973	Miss

90	1.632744019	400	653.0976075	1.07104854	200	214.209708	Miss
91	0.573620367	400	229.4481469	1.6077693	200	321.55386	Miss
92	0.348791971	400	139.5167885	-0.10769648	200	-21.5392966	Hit
93	0.4164282	400	166.5712799	-1.45555171	200	-291.110343	Miss
94	1.76553705	400	706.2148202	-0.20436466	200	-40.8729329	Hit
95	-0.004054443	400	-1.621777023	0.51449954	200	102.899907	Hit
96	-2.064107122	400	-825.6428487	0.39796683	200	79.593366	Hit
97	-0.356317368	400	-142.526947	-0.7586617	200	-151.732339	Hit
98	-0.30173768	400	-120.695072	0.82872337	200	165.744675	Hit
99	0.165628021	400	66.25120852	-0.91725772	200	-183.451545	Hit
100	-0.944683067	400	-377.873227	-0.28732331	200	-57.4646619	Hit
101	-0.805183412	400	-322.0733649	0.02447887	200	4.89577428	Hit
102	-0.268605851	400	-107.4423403	1.56789112	200	313.578223	Miss
103	-0.112375355	400	-44.95014209	-1.47234251	200	-294.468503	Miss
104	-1.577472695	400	-630.9890781	0.13070302	200	26.1406031	Hit
105	1.16522642	400	466.0905681	0.64502412	200	129.004823	Hit
106	0.268556912	400	107.4227647	0.86499936	200	172.999873	Hit
107	1.200705056	400	480.2820224	-0.98497811	200	-196.995623	Hit
108	-0.801038823	400	-320.4155292	-2.72192515	200	-544.385029	Miss
109	0.400440284	400	160.1761137	-0.58559345	200	-117.118689	Hit
110	1.185509783	400	474.2039131	-1.34716692	200	-269.433384	Miss
111	0.14632605	400	58.53042005	0.9605608	200	192.11216	Hit
112	0.757673316	400	303.0693266	-0.587608	200	-117.521601	Hit
113	-1.098110999	400	-439.2443994	-0.53234628	200	-106.469255	Hit
114	0.282391456	400	112.9565825	-0.71038364	200	-142.076728	Hit
115	-2.362633893	400	-945.0535574	-0.12687708	200	-25.3754161	Hit
116	0.355117535	400	142.0470142	1.5120941	200	302.41882	Miss
117	1.682915904	400	673.1663615	0.32722291	200	65.4445814	Hit
118	-0.062699997	400	-25.0799987	0.11891601	200	23.7832014	Hit
119	-0.784170725	400	-313.6682899	2.11707024	200	423.414048	Miss
120	1.549738097	400	619.8952388	-1.23144633	200	-246.289266	Miss
121	-1.817155211	400	-726.8620845	0.46719549	200	93.4390977	Hit
122	1.216368599	400	486.5474395	0.10191864	200	20.3837283	Hit
123	-0.119427158	400	-47.77086332	0.06491658	200	12.9833165	Hit
124	-0.988554718	400	-395.4218872	-0.50181694	200	-100.363387	Hit
125	1.971403626	400	788.5614506	-0.2216787	200	-44.3357396	Hit
126	2.368747843	400	947.4991373	1.15273554	200	230.547109	Miss
127	-1.026928214	400	-410.7712855	0.14986748	200	29.9734963	Hit
128	0.184642412	400	73.85696469	-0.1868501	200	-37.3700208	Hit
129	-1.366241941	400	-546.4967765	0.66931808	200	133.863615	Hit
130	0.187793085	400	75.11723384	0.32527703	200	65.0554051	Hit
131	-0.15844743	400	-63.37897197	0.36932675	200	73.8653502	Hit
132	-0.1759534	400	-70.38136019	1.17679552	200	235.359103	Miss
133	-0.014871723	400	-5.948689075	1.78272244	200	356.544488	Miss
134	-1.940433083	400	-776.1732332	1.05699215	200	211.39843	Miss
135	2.134443374	400	853.7773498	-0.1243406	200	-24.86812	Hit

136	-0.152539801	400	-61.01592033	1.8541832	200	370.836641	Miss
137	0.687468474	400	274.9873895	0.86840113	200	173.680227	Hit
138	-0.494685709	400	-197.8742836	-1.42534003	200	-285.068006	Miss
139	-0.665587626	400	-266.2350504	1.36132426	200	272.264852	Miss
140	-2.100003196	400	-840.0012784	-0.91849762	200	-183.699524	Hit
141	2.275058987	400	910.0235949	0.03215192	200	6.43038433	Hit
142	-0.05723939	400	-22.89575585	-1.08452606	200	-216.905211	Miss
143	-1.563200765	400	-625.2803062	1.09297993	200	218.595985	Miss
144	-0.742036566	400	-296.8146265	0.6298121	200	125.962421	Hit
145	-0.330059581	400	-132.0238325	-1.56323606	200	-312.647211	Miss
146	1.07997759	400	431.9910361	0.64811284	200	129.622567	Hit
147	0.407048004	400	162.8192015	-2.87411798	200	-574.823596	Miss
148	-0.396210208	400	-158.4840834	-1.674648	200	-334.929601	Miss
149	-1.045642448	400	-418.2569792	0.14298662	200	28.5973248	Hit
150	0.635735899	400	254.2943595	0.48213856	200	96.4277123	Hit
151	1.917057433	400	766.8229732	0.26578035	200	53.1560702	Hit
152	-0.677095102	400	-270.8380409	-0.2918802	200	-58.3760407	Hit
153	-0.048431472	400	-19.37258899	0.78984533	200	157.969066	Hit
154	1.307384442	400	522.9537768	-1.21465716	200	-242.931432	Miss
155	-1.50023915	400	-600.09566	-0.45824174	200	-91.6483471	Hit
156	0.115762829	400	46.30513159	-0.29916072	200	-59.8321445	Hit
157	0.353480355	400	141.3921422	-0.55086095	200	-110.17219	Hit
158	1.736084975	400	694.4339899	-1.76769856	200	-353.539712	Miss
159	0.649847453	400	259.9389812	-0.58320498	200	-116.640996	Hit
160	0.191508422	400	76.60336875	-0.7101977	200	-142.03954	Hit
161	0.263673754	400	105.4695017	-0.71478254	200	-142.956508	Hit
162	0.263153402	400	105.2613607	-0.89977075	200	-179.954151	Hit
163	0.47593661	400	190.3746441	0.94051985	200	188.10397	Hit
164	-1.390810201	400	-556.3240803	-0.76060192	200	-152.120385	Hit
165	-0.42522722	400	-170.0908882	-0.34951627	200	-69.9032537	Hit
166	0.318377381	400	127.3509522	1.67990431	200	335.980862	Miss
167	0.788324364	400	315.3297457	1.13413358	200	226.826715	Miss
168	-1.362915523	400	-545.1662091	-0.89939159	200	-179.878317	Hit
169	-1.22204563	400	-488.8182518	1.35390198	200	270.780397	Miss
170	0.70061151	400	280.2446041	1.3548264	200	270.965281	Miss
171	-0.382637918	400	-153.0551673	1.2604218	200	252.084361	Miss
172	0.143828468	400	57.53138735	1.50781432	200	301.562863	Miss
173	0.730366914	400	292.1467657	-1.41877094	200	-283.754187	Miss
174	0.171017804	400	68.40712169	0.5560983	200	111.219661	Hit
175	-1.749188626	400	-699.6754505	0.38012239	200	76.0244771	Hit
176	-0.101991327	400	-40.79653063	0.67514018	200	135.028037	Hit
177	1.61809926	400	647.2397042	0.88182804	200	176.365608	Hit
178	0.162144328	400	64.85773136	-0.43186377	200	-86.3727548	Hit
179	-0.112026571	400	-44.81062857	-0.42486006	200	-84.9720115	Hit
180	-0.356784029	400	-142.7136115	-0.04916805	200	-9.83361025	Hit
181	-1.36634452	400	-546.5378079	-1.36642448	200	-273.284895	Miss

182	0.065559467	400	26.22378695	0.26640269	200	53.2805381	Hit
183	-1.388181824	400	-555.2727297	1.07662761	200	215.325522	Miss
184	0.889119946	400	355.6479785	-0.82268715	200	-164.53743	Hit
185	0.526477452	400	210.5909807	0.80166493	200	160.332986	Hit
186	-1.933016289	400	-773.2065155	-1.14684133	200	-229.368266	Miss
187	-0.005719713	400	-2.287885073	-0.80753819	200	-161.507637	Hit
188	0.26513184	400	106.0527359	0.86348597	200	172.697194	Hit
189	1.042164663	400	416.8658653	-0.87818178	200	-175.636357	Hit
190	-2.456187635	400	-982.4750539	0.13085552	200	26.1711032	Hit
191	0.337392982	400	134.9571927	-1.3235456	200	-264.70912	Miss
192	-0.094184528	400	-37.67381125	-0.11952876	200	-23.9057517	Hit
193	-0.536082729	400	-214.4330916	-0.10403388	200	-20.8067763	Hit
194	0.677357656	400	270.9430624	1.16267504	200	232.535008	Miss
195	0.362458454	400	144.9833816	-0.4194072	200	-83.8814403	Hit
196	0.883514708	400	353.4058832	0.13635484	200	27.2709689	Hit
197	0.111269788	400	44.50791523	-0.09043918	200	-18.0878361	Hit
198	0.090259508	400	36.103803	-0.27284919	200	-54.5698379	Hit
199	-2.607364688	400	-1042.945875	1.20803086	200	241.606171	Miss
200	-0.267792797	400	-107.1171187	-0.82385212	200	-164.770423	Hit
201	0.051179138	400	20.47165525	0.3609344	200	72.1868795	Hit
202	0.433528181	400	173.4112723	-0.15122901	200	-30.2458011	Hit
203	-0.968799791	400	-387.5199164	0.60610733	200	121.221466	Hit
204	-0.667099608	400	-266.8398432	-0.09743125	200	-19.4862502	Hit
205	0.22136975	400	88.54790014	1.50126263	200	300.252527	Miss
206	-1.476928722	400	-590.7714887	0.00900181	200	1.80036135	Hit
207	-0.89447098	400	-357.788392	-0.19143835	200	-38.2876707	Hit
208	0.383825119	400	153.5300476	-0.83832715	200	-167.665429	Hit
209	0.770571646	400	308.2286584	0.81841976	200	163.683952	Hit
210	0.022517485	400	9.006993801	1.84144453	200	368.288905	Miss
211	-2.040886604	400	-816.3546415	0.4256699	200	85.1339796	Hit
212	0.526317689	400	210.5270755	-2.78475316	200	-556.950632	Miss
213	-0.00213174	400	-0.852695803	-0.3746429	200	-74.9285807	Hit
214	1.882447676	400	752.9790704	-0.01458553	200	-2.91710542	Hit
215	-0.815877276	400	-326.3509102	0.53469769	200	106.939537	Hit
216	0.441875911	400	176.7503644	1.41748084	200	283.496168	Miss
217	-0.241181643	400	-96.47265715	-1.11063965	200	-222.127931	Miss
218	-0.090187897	400	-36.0751588	0.46612613	200	93.2252258	Hit
219	-0.75852003	400	-303.4080119	-0.39072866	200	-78.1457316	Hit
220	0.069689034	400	27.87561345	0.1134675	200	22.6935005	Hit
221	-1.174740488	400	-469.8961952	-1.16700785	200	-233.401569	Miss
222	1.683690632	400	673.4762527	0.38951538	200	77.9030765	Hit
223	0.580742463	400	232.2969854	1.52381203	200	304.762406	Miss
224	-0.524153696	400	-209.6614785	0.88705286	200	177.410572	Hit
225	0.097647809	400	39.05912345	0.38218205	200	76.4364095	Hit
226	0.309630793	400	123.8523171	-0.93917139	200	-187.834279	Hit
227	-0.928484398	400	-371.3937594	0.66437772	200	132.875543	Hit

228	-2.50924768	400	-1003.699072	-0.09514559	200	-19.0291181	Hit
229	0.606663952	400	242.6655807	-0.89373624	200	-178.747248	Hit
230	0.976300711	400	390.5202844	-0.64202036	200	-128.404072	Hit
231	1.028681718	400	411.4726871	0.47536854	200	95.0737074	Hit
232	-1.293953483	400	-517.5813932	-1.41045341	200	-282.090681	Miss
233	0.063589728	400	25.43589122	-0.12675761	200	-25.3515217	Hit
234	0.164768537	400	65.90741465	-1.05007237	200	-210.014475	Miss
235	-0.815682836	400	-326.2731345	1.06937142	200	213.874284	Miss
236	-2.077662076	400	-831.0648305	1.85834647	200	371.669294	Miss
237	0.580926121	400	232.3704482	0.30668894	200	61.3377878	Hit
238	0.728961938	400	291.5847754	-0.40466077	200	-80.9321531	Hit
239	-0.495565257	400	-198.2261027	-0.09177302	200	-18.3546039	Hit
240	-0.567343047	400	-226.9372189	0.49106609	200	98.2132171	Hit
241	-0.366636841	400	-146.6547364	-0.72333359	200	-144.666718	Hit
242	-0.880229748	400	-352.0918991	-1.00539249	200	-201.078498	Miss
243	1.370570416	400	548.2281664	2.66959906	200	533.919812	Miss
244	-0.095639842	400	-38.25593663	0.00840181	200	1.68036215	Hit
245	-0.692840198	400	-277.1360793	0.14566653	200	29.1333063	Hit
246	0.095531749	400	38.21269952	0.24912781	200	49.8255616	Hit
247	0.783898035	400	313.5592139	2.30619759	200	461.239518	Miss
248	0.38852866	400	155.411464	0.03228182	200	6.45636362	Hit
249	-1.546643461	400	-618.6573844	-1.33243381	200	-266.486761	Miss
250	1.495658506	400	598.2634025	1.28695514	200	257.391027	Miss
251	0.640794843	400	256.317937	-0.11078016	200	-22.1560326	Hit
252	-0.487889068	400	-195.1556274	0.74843522	200	149.687043	Hit
253	1.046188749	400	418.4754995	-0.88144394	200	-176.288788	Hit
254	-0.716216503	400	-286.4866011	-0.13315157	200	-26.6303143	Hit
255	-0.780722224	400	-312.2888896	-0.44104647	200	-88.2092943	Hit
256	-0.56309279	400	-225.2371159	-0.06870937	200	-13.7418738	Hit
257	1.019208834	400	407.6835334	1.87621024	200	375.242048	Miss
258	0.51894068	400	207.576272	2.27288648	200	454.577296	Miss
259	-0.337550272	400	-135.0201088	-0.17532302	200	-35.0646038	Hit
260	1.635569438	400	654.227775	-0.49279071	200	-98.5581421	Hit
261	-0.044109792	400	-17.64391666	0.44068599	200	88.1371986	Hit
262	-0.496556159	400	-198.6224636	0.23664598	200	47.3291964	Hit
263	0.663595986	400	265.4383944	-0.1629478	200	-32.5895602	Hit
264	-0.104022157	400	-41.60886295	0.39644799	200	79.2895983	Hit
265	-1.294696793	400	-517.8787173	-0.71545525	200	-143.091049	Hit
266	-1.018378751	400	-407.3515002	1.23198924	200	246.397848	Miss
267	1.301842271	400	520.7369085	-1.83078239	200	-366.156479	Miss
268	-0.291132676	400	-116.4530704	0.29137841	200	58.2756822	Hit
269	0.151115649	400	60.44625974	-0.73573788	200	-147.147577	Hit
270	0.805618168	400	322.2472671	1.13506588	200	227.013177	Miss
271	-1.118264172	400	-447.3056688	0.01243097	200	2.48619324	Hit
272	0.469453456	400	187.7813825	-0.42561511	200	-85.1230222	Hit
273	-0.279825421	400	-111.9301684	0.38370073	200	76.7401468	Hit

274	0.243178184	400	97.27127378	-0.63517906	200	-127.035813	Hit
275	0.350447599	400	140.1790398	0.67894575	200	135.78915	Hit
276	0.827736444	400	331.0945775	-0.53198587	200	-106.397174	Hit
277	0.384254933	400	153.7019731	2.38589769	200	477.179539	Miss
278	-1.65792909	400	-663.1716361	0.8176441	200	163.528821	Hit
279	0.131876842	400	52.75073676	-0.62745696	200	-125.491391	Hit
280	-0.650666161	400	-260.2664645	-1.10993816	200	-221.987633	Miss
281	-1.291596411	400	-516.6385644	0.1764427	200	35.2885409	Hit
282	1.514545949	400	605.8183798	-0.7917417	200	-158.348341	Hit
283	-1.380380622	400	-552.1522486	-1.13274135	200	-226.548271	Miss
284	0.607177933	400	242.8711734	-0.51690487	200	-103.380975	Hit
285	0.957277417	400	382.9109668	1.38959095	200	277.918191	Miss
286	-1.310894121	400	-524.3576483	0.34514226	200	69.0284518	Hit
287	-1.204631229	400	-481.8524918	0.25752809	200	51.5056175	Hit
288	1.05765469	400	423.0618761	0.40547024	200	81.0940477	Hit
289	2.237549908	400	895.0199632	-0.37484692	200	-74.9693836	Hit
290	0.01272989	400	5.091955853	1.57092841	200	314.185682	Miss
291	-0.941774629	400	-376.7098515	-1.56063613	200	-312.127226	Miss
292	1.076010019	400	430.4040074	1.07670722	200	215.341445	Miss
293	-1.070053918	400	-428.0215671	0.39403242	200	78.8064835	Hit
294	-0.119319275	400	-47.72771007	-1.89547867	200	-379.095734	Miss
295	-0.171520122	400	-68.60804895	0.44796873	200	89.5937465	Hit
296	0.977910034	400	391.1640135	0.20083007	200	40.166014	Hit
297	1.130064568	400	452.0258271	-0.87741834	200	-175.483667	Hit
298	-0.030947509	400	-12.37900357	0.87319603	200	174.639206	Hit
299	1.675170849	400	670.0683395	0.72836613	200	145.673226	Hit
300	0.176043998	400	70.41759907	0.38651743	200	77.3034864	Hit
301	1.295418726	400	518.1674905	0.80578446	200	161.156892	Hit
302	-0.088361673	400	-35.34466903	0.35582685	200	71.1653708	Hit
303	0.234534585	400	93.81383418	2.48555282	200	497.110563	Miss
304	-0.396727505	400	-158.6910021	-1.53842778	200	-307.685555	Miss
305	0.958986653	400	383.5946611	-1.53834059	200	-307.668118	Miss
306	-1.135731275	400	-454.2925101	-1.13537742	200	-227.075484	Miss
307	-1.04597478	400	-418.3899119	-0.12421723	200	-24.8434469	Hit
308	0.387176455	400	154.870582	-0.55515018	200	-111.030037	Hit
309	-1.589923349	400	-635.9693395	-0.36447103	200	-72.8942051	Hit
310	-1.261423321	400	-504.5693282	-1.30901417	200	-261.802833	Miss
311	0.080725733	400	32.29029332	-0.05651077	200	-11.3021542	Hit
312	-0.58011968	400	-232.0478719	-0.79687226	200	-159.374451	Hit
313	-1.34259243	400	-537.0369722	-0.93110965	200	-186.22193	Hit
314	-0.955873651	400	-382.3494603	1.30172141	200	260.344282	Miss
315	-1.25584353	400	-502.337412	0.20629459	200	41.2589188	Hit
316	0.106550839	400	42.62033555	-0.16971701	200	-33.943401	Hit
317	-2.187827328	400	-875.1309312	-1.00577838	200	-201.155676	Miss
318	0.170581956	400	68.2327824	0.4456695	200	89.1338996	Hit
319	0.903664143	400	361.4656573	1.60008866	200	320.017731	Miss

320	0.480200883	400	192.0803532	-0.02091549	200	-4.1830976	Hit
321	0.911913542	400	364.7654169	0.60781491	200	121.562981	Hit
322	1.019023793	400	407.6095173	0.62218749	200	124.437498	Hit
323	0.069589165	400	27.83566592	-0.15771403	200	-31.5428056	Hit
324	0.802428099	400	320.9712397	0.31031858	200	62.0637154	Hit
325	0.312760538	400	125.1042154	-0.19120825	200	-38.2416495	Hit
326	0.053284391	400	21.31375633	-0.46771101	200	-93.5422014	Hit
327	0.734520228	400	293.8080911	-1.05257407	200	-210.514815	Miss
328	-0.340241713	400	-136.0966852	1.11269761	200	222.539523	Miss
329	0.998536078	400	399.4144312	-0.98883033	200	-197.766067	Hit
330	1.077643337	400	431.0573346	2.51970398	200	503.940796	Miss
331	0.535671503	400	214.2686012	-0.72524119	200	-145.048238	Hit
332	0.181079773	400	72.43190937	0.49591313	200	99.1826257	Hit
333	-0.337802688	400	-135.1210752	1.02770783	200	205.541565	Miss
334	0.090822934	400	36.32917377	0.95905766	200	191.811533	Hit
335	0.118586763	400	47.43470506	0.36005639	200	72.0112781	Hit
336	-0.507196978	400	-202.8787911	-1.05436502	200	-210.873004	Miss
337	1.258133365	400	503.2533459	0.05630919	200	11.2618376	Hit
338	0.7728889	400	309.1555602	0.21642921	200	43.2858426	Hit
339	-0.125554808	400	-50.22192335	-0.16637831	200	-33.2756622	Hit
340	-0.299244385	400	-119.6977541	-1.36279603	200	-272.559205	Miss
341	-0.959018499	400	-383.6073996	1.07799105	200	215.59821	Miss
342	-1.145226483	400	-458.0905933	-0.25827328	200	-51.6546552	Hit
343	0.0565846	400	22.63384003	-0.45011843	200	-90.0236861	Hit
344	0.36690271	400	146.761084	-0.58431331	200	-116.862662	Hit
345	-0.059145143	400	-23.65805702	0.82793317	200	165.586634	Hit
346	0.110458038	400	44.18321512	0.45295406	200	90.5908122	Hit
347	-1.987978535	400	-795.1914139	-0.0115229	200	-2.30457912	Hit
348	0.287907494	400	115.1629976	-0.69088332	200	-138.176663	Hit
349	-0.145311847	400	-58.1247388	0.16212245	200	32.4244892	Hit
350	0.274405786	400	109.7623145	-1.36852599	200	-273.705198	Miss
351	0.408592265	400	163.436906	0.1637825	200	32.7564998	Hit
352	-0.317787784	400	-127.1151135	1.08705344	200	217.410687	Miss
353	0.967296726	400	386.9186906	-1.39657934	200	-279.315867	Miss
354	0.441776017	400	176.7104067	0.2114262	200	42.2852406	Hit
355	1.067973388	400	427.1893553	1.22911489	200	245.822979	Miss
356	0.146719912	400	58.68796463	-0.5607727	200	-112.15454	Hit
357	1.93412863	400	773.6514521	-0.07616951	200	-15.2339019	Hit
358	-0.44611397	400	-178.4455879	1.0563259	200	211.26518	Miss
359	1.243601465	400	497.440586	-0.46769208	200	-93.5384151	Hit
360	0.592868651	400	237.1474604	-1.69543457	200	-339.086915	Miss
361	0.482723063	400	193.089225	-1.89271579	200	-378.543159	Miss
362	-0.906334314	400	-362.5337255	-0.50077456	200	-100.154911	Hit
363	-0.369894288	400	-147.9577152	0.82004096	200	164.008191	Hit
364	0.686085154	400	274.4340617	-0.83923494	200	-167.846989	Hit
365	-0.730437401	400	-292.1749602	1.5768166	200	315.363321	Miss

366	0.953808811	400	381.5235244	-1.04782888	200	-209.565777	Miss
367	-1.334044257	400	-533.6177029	0.10063872	200	20.1277443	Hit
368	1.231337464	400	492.5349857	-0.76383791	200	-152.767583	Hit
369	-0.399397203	400	-159.7588811	-1.72425378	200	-344.850756	Miss
370	-2.315018926	400	-926.0075704	-0.13105674	200	-26.2113478	Hit
371	1.349306482	400	539.7225929	0.61123868	200	122.247737	Hit
372	0.24503964	400	98.0158558	0.50148339	200	100.296678	Hit
373	1.85476148	400	741.9045918	0.68342869	200	136.685737	Hit
374	0.725502009	400	290.2008035	2.0802221	200	416.04442	Miss
375	0.822152319	400	328.8609274	0.70414067	200	140.828133	Hit
376	-0.398183081	400	-159.2732325	0.19307319	200	38.6146374	Hit
377	1.076024107	400	430.4096427	-0.59985135	200	-119.97027	Hit
378	0.690921748	400	276.3686992	1.24959674	200	249.919347	Miss
379	-0.704370988	400	-281.7483953	0.2646204	200	52.9240809	Hit
380	-1.304037832	400	-521.615133	-0.15151814	200	-30.3036281	Hit
381	0.795107	400	318.0427998	-0.48698431	200	-97.3968621	Hit
382	-0.178870257	400	-71.54810266	1.48567799	200	297.135598	Miss
383	0.148989547	400	59.59581883	-1.62544787	200	-325.089573	Miss
384	0.235414749	400	94.16589962	-0.70611678	200	-141.223356	Hit
385	0.403016832	400	161.2067329	-0.50241645	200	-100.483289	Hit
386	0.728454953	400	291.3819812	0.92089594	200	184.179189	Hit
387	0.039975796	400	15.99031854	-0.14883866	200	-29.7677316	Hit
388	0.809427196	400	323.7708784	-0.35933721	200	-71.8674424	Hit
389	-0.364650696	400	-145.8602785	0.81478298	200	162.956595	Hit
390	0.471986338	400	188.7945353	-0.60844098	200	-121.688197	Hit
391	1.404004106	400	561.6016425	-0.22304984	200	-44.6099671	Hit
392	0.242152987	400	96.86119463	-0.34266147	200	-68.5322937	Hit
393	-0.376274165	400	-150.5096661	0.93947134	200	187.894268	Hit
394	1.249709934	400	499.8839736	-1.15156592	200	-230.313184	Miss
395	0.068507972	400	27.40318873	1.59552366	200	319.104732	Miss
396	-1.531102207	400	-612.4408829	0.14012199	200	28.0243977	Hit
397	-1.172351825	400	-468.9407301	0.93093949	200	186.187899	Hit
398	-0.040725989	400	-16.29039557	0.61691611	200	123.383222	Hit
399	-0.665460182	400	-266.1840726	1.64653772	200	329.307544	Miss
400	-1.135379054	400	-454.1516215	0.73123563	200	146.247125	Hit
401	-0.585738831	400	-234.2955323	0.33133029	200	66.2660575	Hit
402	1.196455001	400	478.5820003	0.2284978	200	45.6995591	Hit
403	0.11151533	400	44.60613218	-1.0420814	200	-208.41628	Miss
404	0.162393968	400	64.95758729	0.04487088	200	8.97417511	Hit
405	-1.320596175	400	-528.2384698	-1.86441547	200	-372.883093	Miss
406	0.507427696	400	202.9710785	2.13455404	200	426.910808	Miss
407	-1.879193717	400	-751.677487	1.20300965	200	240.601929	Miss
408	0.958483775	400	383.3935101	-0.12491981	200	-24.9839626	Hit
409	0.022265255	400	8.906102149	2.61282216	200	522.564433	Miss
410	-1.29556814	400	-518.2272559	-1.42574016	200	-285.148032	Miss
411	0.226754553	400	90.70182121	-0.19507249	200	-39.0144983	Hit

412	1.728018324	400	691.2073296	0.29707405	200	59.4148104	Hit
413	1.145693341	400	458.2773365	-0.74001767	200	-148.003534	Hit
414	1.314266298	400	525.7065193	0.58946771	200	117.893542	Hit
415	-0.118975137	400	-47.59005466	0.14272107	200	28.5442144	Hit
416	1.456263408	400	582.5053633	-0.22574774	200	-45.1495489	Hit
417	-1.534401196	400	-613.7604784	-1.14598962	200	-229.197924	Miss
418	0.363725958	400	145.4903831	-0.29973908	200	-59.9478151	Hit
419	-0.987177382	400	-394.8709528	1.45833192	200	291.666385	Miss
420	-0.271509374	400	-108.6037495	0.79425529	200	158.851058	Hit
421	0.51544537	400	206.1781481	-2.01228024	200	-402.456048	Miss
422	0.07357046	400	29.42818402	1.82246063	200	364.492127	Miss
423	-0.567106558	400	-226.8426232	2.02760348	200	405.520696	Miss
424	-1.076603542	400	-430.641417	0.34918332	200	69.836664	Hit
425	0.930115136	400	372.0460545	0.05496538	200	10.9930759	Hit
426	-0.34173939	400	-136.6957561	-0.35955111	200	-71.9102213	Hit
427	1.076137934	400	430.4551735	-0.49862767	200	-99.7255348	Hit
428	-0.696095425	400	-278.4381701	-0.5810681	200	-116.21362	Hit
429	0.178438499	400	71.37539964	-0.36804579	200	-73.6091583	Hit
430	-0.580466718	400	-232.1866874	0.58839799	200	117.679599	Hit
431	-0.38293914	400	-153.1756559	0.36723718	200	73.4474364	Hit
432	-1.477240306	400	-590.8961226	-0.50800948	200	-101.601896	Hit
433	1.121271799	400	448.5087197	-0.5721095	200	-114.4219	Hit
434	-0.191814862	400	-76.72594495	0.39383676	200	78.7673523	Hit
435	-0.964809419	400	-385.9237677	-0.79685616	200	-159.371233	Hit
436	-0.089242147	400	-35.69685893	-0.86016092	200	-172.032184	Hit
437	0.201431219	400	80.57248747	-0.94636541	200	-189.273082	Hit
438	-1.577122912	400	-630.8491647	-0.01139938	200	-2.27987573	Hit
439	0.05865904	400	23.46361609	-0.30192949	200	-60.3858971	Hit
440	-0.418654449	400	-167.4617797	-0.18951532	200	-37.903063	Hit
441	0.849845556	400	339.9382222	0.6551782	200	131.035639	Hit
442	-1.277656183	400	-511.0624734	1.88487774	200	376.975547	Miss
443	-1.620779349	400	-648.3117395	0.78279674	200	156.559348	Hit
444	-1.329221468	400	-531.6885873	-1.50553447	200	-301.106894	Miss
445	0.924796224	400	369.9184894	0.98167665	200	196.33533	Hit
446	-0.949262373	400	-379.7049492	-0.3239133	200	-64.7826595	Hit
447	-0.823370971	400	-329.3483882	-0.82082162	200	-164.164324	Hit
448	-0.499906121	400	-199.9624483	-0.89058734	200	-178.117468	Hit
449	0.758240562	400	303.296225	0.05777122	200	11.5542448	Hit
450	0.773598517	400	309.4394068	0.24560541	200	49.1210826	Hit
451	0.49582271	400	198.329084	0.01206084	200	2.41216802	Hit
452	0.847372368	400	338.9489473	-0.55974468	200	-111.948937	Hit
453	-2.367559249	400	-947.0236998	0.82463427	200	164.926854	Hit
454	1.31902831	400	527.6113238	-1.45279918	200	-290.559836	Miss
455	-0.296395079	400	-118.5580317	1.23155586	200	246.311172	Miss
456	0.286433161	400	114.5732643	0.90801507	200	181.603015	Hit
457	-2.279950026	400	-911.9800106	-1.36796991	200	-273.593982	Miss

458	1.851809039	400	740.7236157	-1.44840523	200	-289.681046	Miss
459	0.974012336	400	389.6049344	1.41729903	200	283.459806	Miss
460	-0.336240078	400	-134.4960311	1.68090475	200	336.18095	Miss
461	-0.193429465	400	-77.37178586	0.30273365	200	60.5467294	Hit
462	-1.166913085	400	-466.7652338	0.17059671	200	34.1193411	Hit
463	1.025510451	400	410.2041804	0.37501985	200	75.0039692	Hit
464	-0.610616126	400	-244.2464503	0.44662685	200	89.3253707	Hit
465	-0.776885148	400	-310.7540592	0.40198629	200	80.3972573	Hit
466	0.050598964	400	20.23958541	-0.1235491	200	-24.7098207	Hit
467	-1.146788298	400	-458.715319	-0.13912887	200	-27.8257746	Hit
468	0.542294661	400	216.9178645	0.46189124	200	92.3782474	Hit
469	-0.534444945	400	-213.777978	0.05066993	200	10.1339855	Hit
470	-1.867504026	400	-747.0016103	-0.35907038	200	-71.8140768	Hit
471	0.578042639	400	231.2170554	0.15233504	200	30.4670081	Hit
472	1.452636254	400	581.0545016	0.18588258	200	37.1765167	Hit
473	-0.143447531	400	-57.37901243	0.35874694	200	71.7493884	Hit
474	-1.013121525	400	-405.24861	0.11155762	200	22.311525	Hit
475	-1.094344055	400	-437.7376218	-0.48437617	200	-96.875233	Hit
476	-0.831345316	400	-332.5381265	0.70046714	200	140.093428	Hit
477	-1.006641178	400	-402.656471	-0.20520911	200	-41.0418222	Hit
478	-0.178588094	400	-71.43523778	1.126498	200	225.2996	Miss
479	-0.897188979	400	-358.8755915	0.09992552	200	19.9851044	Hit
480	-0.533828066	400	-213.5312264	-1.70825231	200	-341.650462	Miss
481	0.439351238	400	175.7404953	-2.77251183	200	-554.502367	Miss
482	-0.261379717	400	-104.5518869	1.12472868	200	224.945736	Miss
483	-0.037340202	400	-14.93608086	0.06744579	200	13.4891572	Hit
484	0.99645126	400	398.580504	-0.27025322	200	-54.0506435	Hit
485	-0.618283564	400	-247.3134255	0.00548829	200	1.09765839	Hit
486	0.139808355	400	55.92334214	-0.51428677	200	-102.857354	Hit
487	0.745159831	400	298.0639325	-0.56911336	200	-113.822671	Hit
488	0.42778081	400	171.1123241	0.08950579	200	17.9011583	Hit
489	-0.276229907	400	-110.4919628	-0.33520529	200	-67.0410589	Hit
490	-0.974166046	400	-389.6664184	0.20142219	200	40.2844373	Hit
491	-0.253812307	400	-101.5249229	1.05150396	200	210.300793	Miss
492	-0.018706566	400	-7.48262644	-0.06829808	200	-13.6596158	Hit
493	0.13557088	400	54.22835215	-0.85838792	200	-171.677583	Hit
494	-0.472505103	400	-189.0020411	0.16353854	200	32.7077081	Hit
495	-0.895152678	400	-358.0610713	-0.34210646	200	-68.4212914	Hit
496	0.98551339	400	394.205356	-0.90873323	200	-181.746646	Hit
497	0.135293797	400	54.11751886	-0.61982509	200	-123.965018	Hit
498	0.974782415	400	389.9129659	0.94292036	200	188.584072	Hit
499	1.102230795	400	440.8923181	-0.31146653	200	-62.2933062	Hit
500	0.220354504	400	88.14180161	-0.20313379	200	-40.6267576	Hit
501	0.852443801	400	340.9775204	-0.2059553	200	-41.1910602	Hit
502	0.299778068	400	119.9112272	0.20804148	200	41.6082969	Hit
503	-1.927864956	400	-771.1459823	-2.05431157	200	-410.862314	Miss

504	0.830368391	400	332.1473563	0.37736664	200	75.4733273	Hit
505	0.668822765	400	267.529106	-0.26498528	200	-52.9970568	Hit
506	1.241774196	400	496.7096785	0.09872321	200	19.7446423	Hit
507	0.318932876	400	127.5731504	1.20467615	200	240.93523	Miss
508	-0.642893748	400	-257.1574994	1.40476874	200	280.953748	Miss
509	-0.568139092	400	-227.2556367	0.29575951	200	59.1519024	Hit
510	0.016472795	400	6.589118099	-1.85055758	200	-370.111515	Miss
511	1.618237851	400	647.2951404	-1.11889458	200	-223.778916	Miss
512	0.696108162	400	278.4432648	1.16983016	200	233.966031	Miss
513	0.755278267	400	302.1113066	-0.06511954	200	-13.0239081	Hit
514	0.576100313	400	230.4401252	0.30622185	200	61.2443697	Hit
515	-0.066927368	400	-26.77094703	0.22265106	200	44.5302118	Hit
516	0.021890257	400	8.756102792	0.77300634	200	154.601268	Hit
517	0.561584349	400	224.6337398	0.36686373	200	73.3727452	Hit
518	-0.215830813	400	-86.33232518	-1.12384696	200	-224.769391	Miss
519	-1.045065588	400	-418.026235	-0.06847687	200	-13.6953744	Hit
520	-0.754802353	400	-301.9209411	0.27942818	200	55.8856352	Hit
521	-1.067417103	400	-426.966841	1.26799032	200	253.598064	Miss
522	-0.811218956	400	-324.4875824	0.83547916	200	167.095832	Hit
523	-0.395641442	400	-158.2565767	1.62892962	200	325.785924	Miss
524	0.722286957	400	288.914783	1.78206799	200	356.413598	Miss
525	2.864168917	400	1145.667567	0.43275456	200	86.5509119	Hit

526	0.996457084	400	398.5828337	0.498344	200	99.668801	Hit
527	-0.484323252	400	-193.7293007	-0.34298097	200	-68.5961937	Hit
528	0.423513346	400	169.4053385	0.57098047	200	114.196093	Hit
529	-0.18827249	400	-75.30899589	-1.90420125	200	-380.840251	Miss
530	-0.649418756	400	-259.7675024	-1.66208217	200	-332.416433	Miss
531	1.012956044	400	405.1824178	-1.38737663	200	-277.475326	Miss
532	-0.931313545	400	-372.5254178	-0.73689635	200	-147.379271	Hit
533	-0.65681188	400	-262.7247519	0.36052831	200	72.1056617	Hit
534	1.219895259	400	487.9581037	-0.32816586	200	-65.633172	Hit
535	-1.038330772	400	-415.3323088	0.76988954	200	153.977907	Hit
536	-1.554565185	400	-621.8260742	-0.74099594	200	-148.199188	Hit
537	-1.355394271	400	-542.1577084	-0.10669121	200	-21.3382411	Hit
538	2.371364311	400	948.5457244	-1.0728011	200	-214.56022	Miss
539	-0.021437875	400	-8.57515017	-0.20604997	200	-41.2099939	Hit
540	1.205012167	400	482.0048667	-2.40172769	200	-480.345537	Miss
541	-1.040956238	400	-416.382495	-0.32115986	200	-64.2319725	Hit
542	2.188704886	400	875.4819545	-0.21021734	200	-42.0434689	Hit
543	-0.404331674	400	-161.7326694	-0.7952027	200	-159.04054	Hit
544	0.491783974	400	196.7135897	-1.31591428	200	-263.182857	Miss
545	0.642907825	400	257.16313	0.45884185	200	91.7683703	Hit
546	-0.046621076	400	-18.64843024	-0.10753264	200	-21.5065279	Hit
547	0.153954222	400	61.58168895	1.545734	200	309.1468	Miss
548	1.393384874	400	557.3539495	0.11139128	200	22.2782554	Hit
549	-1.636976422	400	-654.7905687	-1.14802989	200	-229.605978	Miss
550	0.922998507	400	369.1994028	-1.32243506	200	-264.487011	Miss
551	0.013100728	400	5.240291301	-1.15020658	200	-230.041315	Miss
552	-0.684419865	400	-273.7679462	-0.64509884	200	-129.019769	Hit
553	0.271922635	400	108.7690538	-0.46828006	200	-93.6560126	Hit
554	0.001984383	400	0.793753227	1.84084902	200	368.169804	Miss
555	-0.450915386	400	-180.3661545	-0.05543876	200	-11.0877513	Hit
556	-0.919831905	400	-367.932762	0.16872092	200	33.7441832	Hit
557	0.30458033	400	121.8321319	0.48061576	200	96.1231511	Hit
558	-0.100331927	400	-40.13277077	-0.86455784	200	-172.911568	Hit
559	-0.972579325	400	-389.0317299	-0.18706622	200	-37.4132444	Hit
560	-0.203976791	400	-81.59071621	-0.21101107	200	-42.2022148	Hit
561	-0.344102964	400	-137.6411855	0.03254828	200	6.50965588	Hit
562	-0.446492982	400	-178.597193	0.36077053	200	72.1541058	Hit
563	0.473686237	400	189.4744947	0.27425285	200	54.8505706	Hit
564	1.907256748	400	762.9026993	-0.67565946	200	-135.131892	Hit
565	1.067912149	400	427.1648595	0.45400155	200	90.8003094	Hit
566	-0.219309767	400	-87.72390684	0.27804881	200	55.609763	Hit
567	-0.059270044	400	-23.70801749	0.09059135	200	18.1182696	Hit
568	-1.039081979	400	-415.6327915	0.25495953	200	50.9919055	Hit
569	1.254565523	400	501.8262092	0.7025806	200	140.51612	Hit
570	0.191790999	400	76.71639961	2.36613579	200	473.227158	Miss