Solução do Problema ship12s - Solver HiGHS

Análise Computacional

17 de setembro de 2025

1 Informações do Problema

Informações do Problema:

- Nome: ship12s

- Número de Variáveis: 2763

- Número de Restrições: 1151

- Inviabilidade Primal: 0.000e+00

- Inviabilidade Dual: 0.000e+00

- Valor Primal: 1.489e+06

- Valor Dual: 1.489e+06

- Gap: 9.973e-22

- Número de Iterações: 16

2 Variáveis Primais e Custos Reduzidos

Tabela 1: Variáveis primais e custos reduzidos do problema ship12s

Coordenada x	Valor x	Coordenada z	Valor z
1	134.294108	1	0.000000
2	67.969197	2	0.000000
3	41.081827	3	0.000000
4	95.548919	4	0.000000
5	92.534166	5	0.000000
6	0.844995	6	0.000000
7	0.460594	7	0.000000
8	1.272464	8	0.000000
9	6.000000	9	0.000000
10	22.399985	10	0.000000
11	32.105882	11	0.000000
12	37.930815	12	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
13	16.218168	13	0.000000
14	32.199999	14	0.000000
15	22.251117	15	0.000000
16	37.265766	16	0.000000
17	8.055003	17	0.000000
18	12.039409	18	0.000000
19	9.700004	19	0.000000
20	0.000000	20	34.605000
21	0.000000	21	33.605000
22	0.000000	22	33.605000
23	0.000000	23	34.605000
24	0.000000	24	2.227500
25	0.000000	25	54.500000
26	16.427535	26	0.000000
27	0.000000	27	1.000000
28	0.000000	28	310.614000
29	0.000000	29	84.054000
30	0.000000	30	129.720000
31	2.232798	31	0.000000
32	0.000000	32	92.196000
33	0.000000	33	116.622000
34	0.000000	34	16.440000
35	0.000000	35	12.900000
36	0.000000	36	94.320000
37	0.168060	37	0.000000
38	0.000000	38	2.988000
39	0.000000	39	72.018000
40	0.000000	40	97.152000
41	0.000000	41	356.634000
42	0.000000	42	169.368000
43	-0.000000	43	0.000000
44	0.000000	44	62.814000
45	0.000000	45	139.632000
46	0.000000	46	59.628000
47	0.000000	47	354.510000
48	0.000000	48	100.692000
49	-0.000000	49	0.000000
50	0.000000	50	105.294000
51	0.000000	51	57.504000
52	0.000000	52	233.598000
53	0.000000	53	499.098000
54	0.000000	54	255.192000
55	0.000000	55	267.936000
56	0.000000	56	273.954000
57	0.000000	57	192.888000
58	0.000000	58	272.892000
59	0.000000	59	2589.096500
60	0.672240	60	0.000000
61	0.072026	61	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
62	0.000000	62	2567.502500
63	0.000000	63	2618.832500
64	0.000000	64	2556.174500
65	0.000000	65	2549.802500
66	-0.000000	66	0.000000
67	0.000000	67	36.816000
68	0.000000	68	2625.912500
69	0.000000	69	2753.352500
70	0.000000	70	2618.124500
71	0.000000	71	2716.182500
72	0.000000	72	2548.584500
73	0.000000	73	2605.734500
74	0.000000	74	2689.632500
75	0.000000	75	2574.582500
76	0.000000	76	2796.186500
77	0.000000	77	2615.646500
78	0.000000	78	2649.276500
79	0.000000	79	2520.618500
80	0.000000	80	2585.556500
81	0.000000	81	2630.160500
82	0.000000	82	4.956000
83	-0.000000	83	0.000000
84	0.000000	84	2602.194500
85	0.000000	85	2603.964500
86	0.000000	86	2587.680500
87	0.000000	87	2661.312500
88	0.000000	88	2827.338500
89	0.000000	89	2693.172500
90	0.000000	90	2660.958500
91	0.000000	91	2602.392500
92	0.000000	92	2670.870500
93	0.000000	93	2626.974500
94	0.000000	94	2606.796500
95	0.000000	95	2848.224500
96	0.000000	96	2643.258500
97	0.000000	97	2634.054500
98	0.000000	98	160.872000
99	0.000000	99	454.692000
100	0.000000	100	196.272000
101	0.000000	101	208.308000
102	0.576206	102	0.000000
103	0.000000	103	187.776000
104	0.000000	104	49.362000
105	0.000000	105	203.706000
106	0.000000	106	2618.124500
107	0.000000	107	2655.294500
108	0.216077	108	0.000000
109	0.000000	109	2603.256500
110	0.000000	110	2838.666500

Coordenada x	Valor x	Coordenada z	Valor z
111	0.000000	111	2622.372500
112	0.000000	112	2590.866500
113	0.336120	113	0.000000
114	0.000000	114	79.098000
115	0.000000	115	346.014000
116	0.000000	116	119.100000
117	0.000000	117	183.174000
118	1.104390	118	0.000000
119	0.000000	119	135.738000
120	0.000000	120	174.678000
121	0.000000	121	60.690000
122	0.000000	122	277.338000
123	0.000000	123	62.814000
124	0.000000	124	150.606000
125	1.656590	125	0.000000
126	0.000000	126	46.884000
127	0.000000	127	25.644000
128	0.000000	128	135.384000
129	0.000000	129	2564.670500
130	-0.000000	130	0.000000
131	0.000000	131	8.496000
132	0.168060	132	0.000000
133	0.000000	133	2550.510500
134	0.000000	134	0.354000
135	0.264094	135	0.000000
136	0.576206	136	0.000000
137	0.000000	137	89.010000
138	0.000000	138	360.882000
139	0.000000	139	101.754000
140	0.000000	140	160.518000
141	0.672240	141	0.000000
142	0.000000	142	116.268000
143	0.000000	143	34.494000
144	0.000000	144	175.032000
145	0.000000	145	45.468000
146	0.000000	146	233.796000
147	0.000000	147	53.610000
148	0.000000	148	146.004000
149	1.464520	149	0.000000
150	0.000000	150	70.248000
151	0.000000	151	156.270000
152	0.000000	152	2557.590500
153	0.288103	153	0.000000
154	0.000000	154	173.616000
155	0.504180	155	0.000000
156	0.792283	156	0.000000
157	0.000000	157	184.944000
158	0.672240	158	0.000000
159	0.000000	159	46.176000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
160	0.000000	160	291.144000
161	0.000000	161	52.194000
162	0.000000	162	149.544000
163	1.560557	163	0.000000
164	0.000000	164	135.030000
165	0.000000	165	172.908000
166	0.000000	166	449.382000
167	0.000000	167	177.510000
168	0.000000	168	220.698000
169	3.169130	169	0.000000
170	0.000000	170	193.440000
171	0.000000	171	34.140000
172	0.000000	172	227.424000
173	0.192069	173	0.000000
174	0.000000	174	154.854000
175	0.000000	175	404.424000
176	0.000000	176	172.554000
177	0.000000	177	189.546000
178	0.576206	178	0.000000
179	0.000000	179	179.634000
180	0.000000	180	30.954000
181	0.000000	181	199.458000
182	0.000000	182	200.874000
183	0.000000	183	446.196000
184	0.000000	184	187.422000
185	0.000000	185	221.052000
186	1.584570	186	0.000000
187	0.000000	187	203.352000
188	0.000000	188	42.636000
189	0.000000	189	228.132000
190	0.000000	190	143.880000
191	0.120043	191	0.000000
192	0.000000	192	207.600000
193	0.000000	193	466.374000
194	0.000000	194	218.574000
195	0.000000	195	253.974000
196	2.784990	196	0.000000
197	0.000000	197	239.460000
198	0.000000	198	64.230000
199	0.000000	199	232.380000
200	0.000000	200	127.596000
201	0.000000	201	409.380000
202	0.000000	202	155.562000
203	0.000000	203	170.076000
204	0.792283	204	0.000000
205	0.000000	205	180.342000
206	0.000000	206	28.476000
207	0.000000	207	183.882000
208	0.000000	208	155.562000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
209	0.000000	209	436.284000
210	0.000000	210	179.988000
211	0.000000	211	202.644000
212	2.280810	212	0.000000
213	0.000000	213	198.042000
214	0.000000	214	30.954000
215	0.000000	215	207.954000
216	0.000000	216	151.314000
217	0.480172	217	0.000000
218	0.000000	218	160.872000
219	0.000000	219	455.046000
220	0.000000	220	186.006000
221	0.000000	221	238.398000
222	-0.000000	222	0.000000
223	0.000000	223	223.176000
224	0.000000	224	217.866000
225	0.000000	225	2805.744500
226	0.000000	226	2788.752500
227	0.000000	227	2779.194500
228	0.000000	228	2838.666500
229	0.000000	229	2775.300500
230	0.000000	230	2677.596500
231	0.000000	231	2889.288500
232	0.216077	232	0.000000
233	0.000000	233	2771.406500
234	0.048017	234	0.000000
235	0.096034	235	0.000000
236	0.000000	236	2672.640500
237	0.000000	237	2853.534500
238	0.000000	238	2792.292500
239	0.000000	239	2680.074500
240	0.000000	240	2813.532500
241	0.000000	241	50.778000
242	0.000000	242	350.616000
243	0.000000	243	101.046000
244	0.000000	244	38.034000
245	-0.000000	245	0.000000
246	0.000000	246	96.444000
247	0.000000	247	2765.034500
248	0.000000	248	275.214000
249	0.000000	249	123.702000
250	30.454680	250	0.000000
251	0.000000	251	79.563500
252	0.000000	252	112.020000
253	0.000000	253	24.936000
254	0.000000	254	51.840000
255	0.000000	255	87.948000
256	13.759640	256	0.000000
257	0.000000	257	114.963500

Coordenada x	Valor x	Coordenada z	Valor z
258	0.000000	258	58.212000
259	0.000000	259	15.732000
260	0.000000	260	57.504000
261	0.000000	261	281.586000
262	-0.000000	262	0.000000
263	0.000000	263	39.915500
264	0.000000	264	42.990000
265	0.000000	265	8.298000
266	0.000000	266	162.288000
267	0.000000	267	421.770000
268	0.000000	268	243.000000
269	0.000000	269	182.223500
270	0.000000	270	227.778000
271	0.000000	271	68.478000
272	0.000000	272	126.974500
273	0.000000	273	357.074500
274	0.000000	274	188.216500
275	0.000000	275	31.592500
276	0.000000	276	187.154500
277	0.000000	277	165.828000
278	0.000000	278	74.582500
279	0.366924	279	0.000000
280	3.118850	280	0.000000
281	2.751930	281	0.000000
282	0.550386	282	0.000000
283	2.018080	283	0.000000
284	1.651160	284	0.000000
285	1.284230	285	0.000000
286	1.467700	286	0.000000
287	0.000000	287	56.640000
288	0.000000	288	39.450000
289	0.000000	289	131.490000
290	0.000000	290	71.310000
291	4.586550	291	0.000000
292	0.000000	292	41.685500
293	0.000000	293	39.096000
294	0.000000	294	11.484000
295	0.000000	295	55.026000
296	0.000000	296	241.230000
297	0.000000	297	135.738000
298	4.403090	298	0.000000
299	0.000000	299	80.625500
300	0.000000	300	85.824000
301	0.000000	301	18.918000
302	0.000000	302	96.642000
303	4.036160	303	0.000000
304	1.651160	304	0.000000
305	1.284230	305	0.000000
306	1.651160	306	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
307	0.000000	307	130.074000
308	0.000000	308	260.700000
309	0.000000	309	201.582000
310	4.953470	310	0.000000
311	0.000000	311	150.717500
312	0.000000	312	47.946000
313	1.100770	313	0.000000
314	1.284230	314	0.000000
315	2.201540	315	0.000000
316	0.366924	316	0.000000
317	0.733848	317	0.000000
318	0.000000	318	82.284000
319	0.000000	319	340.704000
320	0.000000	320	157.332000
321	2.935390	321	0.000000
322	0.000000	322	0.975500
323	0.000000	323	129.012000
324	0.000000	324	50.337500
325	0.000000	325	33.432000
326	1.284230	326	0.000000
327	3.852700	327	0.000000
328	1.834620	328	0.000000
329	2.751930	329	0.000000
330	2.385000	330	0.000000
331	3.302310	331	0.000000
332	1.467700	332	0.000000
333	0.917310	333	0.000000
334	0.000000	334	25.644000
335	0.000000	335	257.160000
336	0.000000	336	105.294000
337	4.036160	337	0.000000
338	0.000000	338	26.109500
339	0.000000	339	102.108000
340	0.000000	340	29.538000
341	0.000000	341	39.804000
342	0.000000	342	221.052000
343	0.000000	343	81.576000
344	6.421170	344	0.000000
345	0.000000	345	58.677500
346	0.000000	346	45.822000
347	0.000000	347	84.321500
348	0.000000	348	22.812000
349	0.917310	349	0.000000
350	2.385000	350	0.000000
351	0.000000	351	28.320000
352	3.302310	352	0.000000
353	0.733848	353	0.000000
354	3.485780	354	0.000000
355	0.000000	355	19.470000

Coordenada x	Valor x	Coordenada z	Valor z
356	2.568470	356	0.000000
357	0.000000	357	58.212000
358	0.000000	358	294.684000
359	0.000000	359	110.604000
360	3.669240	360	0.000000
361	0.000000	361	48.765500
362	0.000000	362	105.294000
363	0.000000	363	83.259500
364	0.000000	364	52.548000
365	0.000000	365	29.184000
366	0.000000	366	182.112000
367	0.000000	367	76.974000
368	4.953470	368	0.000000
369	0.000000	369	63.279500
370	0.000000	370	73.788000
371	0.000000	371	48.300000
372	2.018080	372	0.000000
373	2.568470	373	0.000000
374	0.000000	374	94.052500
375	1.284230	375	0.000000
376	2.018080	376	0.000000
377	0.000000	377	105.380500
378	2.201540	378	0.000000
379	0.000000	379	26.352000
380	0.000000	380	235.920000
381	0.000000	381	72.018000
382	14.126562	382	0.000000
383	0.000000	383	59.739500
384	0.000000	384	23.520000
385	0.000000	385	93.344500
386	0.000000	386	334.418500
387	0.000000	387	137.594500
388	0.000000	388	11.414500
389	10.824300	389	0.000000
390	0.000000	390	133.700500
391	0.000000	391	34.140000
392	0.000000	392	56.174500
393	0.917310	393	0.000000
394	0.000000	394	95.028000
395	0.000000	395	309.198000
396	0.000000	396	152.376000
397	4.036160	397	0.000000
398	0.000000	398	19.737500
399	0.000000	399	139.632000
400	0.000000	400	50.691500
401	0.000000	401	47.946000
402	0.000000	402	121.310500
403	0.000000	403	331.232500
404	0.000000	404	147.506500

Coordenada x	Valor x	Coordenada z	Valor z
405	0.000000	405	11.768500
406	4.586550	406	0.000000
407	0.000000	407	143.612500
408	0.000000	408	42.636000
409	0.000000	409	56.882500
410	0.000000	410	64.316500
411	1.651160	411	0.000000
412	0.000000	412	128.036500
413	0.000000	413	351.410500
414	0.000000	414	178.658500
415	0.000000	415	44.690500
416	9.356560	416	0.000000
417	0.000000	417	179.720500
418	0.000000	418	64.230000
419	0.000000	419	61.130500
420	0.000000	420	87.240000
421	0.000000	421	333.624000
422	0.000000	422	154.854000
423	4.036160	423	0.000000
424	0.000000	424	39.207500
425	0.000000	425	159.810000
426	0.000000	426	67.683500
427	0.000000	427	51.840000
428	0.000000	428	82.638000
429	0.000000	429	327.960000
430	0.000000	430	146.712000
431	6.788090	431	0.000000
432	0.000000	432	6.639500
433	0.000000	433	144.942000
434	0.000000	434	37.593500
435	0.000000	435	43.344000
436	0.000000	436	71.750500
437	2.018080	437	0.000000
438	0.000000	438	81.308500
439	0.000000	439	340.082500
440	0.000000	440	146.090500
441	0.000000	441	29.114500
442	-0.000000	442	0.000000
443	0.000000	443	163.436500
444	0.000000	444	46.616500
445	0.550386	445	0.000000
446	0.550386	446	0.000000
447	0.550386	447	0.000000
448	0.366924	448	0.000000
449	0.550386	449	0.000000
450	3.302310	450	0.000000
451	0.366924	451	0.000000
452	0.733848	452	0.000000
453	0.550386	453	0.000000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
454	0.733848	454	0.000000
455	0.550386	455	0.000000
456	2.201540	456	0.000000
457	2.568470	457	0.000000
458	0.183462	458	0.000000
459	0.550386	459	0.000000
460	0.550386	460	0.000000
461	0.000000	461	142.464000
462	0.000000	462	406.902000
463	0.000000	463	232.380000
464	4.036160	464	0.000000
465	0.000000	465	171.249500
466	0.000000	466	207.954000
467	1.100770	467	0.000000
468	0.000000	468	275.214000
469	0.000000	469	107.617500
470	17.787432	470	0.000000
471	0.000000	471	23.563500
472	0.000000	472	112.020000
473	0.000000	473	24.936000
474	0.000000	474	51.840000
475	0.000000	475	71.863500
476	10.248388	476	0.000000
477	0.000000	477	58.963500
478	0.000000	478	58.212000
479	0.000000	479	15.732000
480	0.000000	480	73.588500
481	0.000000	481	297.670500
482	0.000000	482	16.084500
483	-0.000000	483	0.000000
484	0.000000	484	59.074500
485	0.000000	485	24.382500
486	0.000000	486	162.288000
487	0.000000	487	421.770000
488	0.000000	488	226.915500
489	0.000000	489	126.223500
490	0.000000	490	227.778000
491	0.000000	491	68.478000
492	0.000000	492	182.974500
493	0.000000	493	413.074500
494	0.000000	494	228.132000
495	0.000000	495	87.592500
496	0.000000	496	243.154500
497	0.000000	497	165.828000
498	0.000000	498	130.582500
499	0.353393	499	0.000000
500	2.238150	500	0.000000
501	1.413570	501	0.000000
502	0.471190	502	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
503	1.531370	503	0.000000
504	0.942381	504	0.000000
505	0.942381	505	0.000000
506	0.706785	506	0.000000
507	0.000000	507	56.640000
508	0.000000	508	53.764500
509	0.000000	509	145.804500
510	0.000000	510	69.540000
511	0.000000	511	14.314500
512	2.944940	512	0.000000
513	0.000000	513	53.410500
514	0.000000	514	25.798500
515	0.000000	515	55.026000
516	0.000000	516	241.230000
517	0.000000	517	119.653500
518	3.062740	518	0.000000
519	0.000000	519	24.625500
520	0.000000	520	85.824000
521	0.000000	521	18.918000
522	0.000000	522	96.642000
523	2.002560	523	0.000000
524	0.824583	524	0.000000
525	0.824583	525	0.000000
526	1.177980	526	0.000000
527	0.000000	527	130.074000
528	0.000000	528	260.700000
529	0.000000	529	185.497500
530	2.591550	530	0.000000
531	0.000000	531	94.717500
532	0.000000	532	47.946000
533	0.588988	533	0.000000
534	0.824583	534	0.000000
535	1.884760	535	0.000000
536	0.235595	536	0.000000
537	0.706785	537	0.000000
538	0.000000	538	137.308500
539	0.000000	539	395.728500
540	0.000000	540	196.272000
541	0.000000	541	55.024500
542	2.591550	542	0.000000
543	0.000000	543	184.036500
544	0.000000	544	49.362000
545	0.000000	545	88.456500
546	0.824583	546	0.000000
547	2.473750	547	0.000000
548	0.942381	548	0.000000
549	1.766960	549	0.000000
550	1.531370	550	0.000000
551	2.473750	551	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
552	0.942381	552	0.000000
553	0.824583	553	0.000000
554	0.000000	554	55.534500
555	0.000000	555	287.050500
556	0.000000	556	119.100000
557	0.000000	557	29.890500
558	2.591550	558	0.000000
559	0.000000	559	131.998500
560	0.000000	560	59.428500
561	0.000000	561	39.804000
562	0.000000	562	221.052000
563	0.000000	563	65.491500
564	5.300890	564	0.000000
565	0.000000	565	2.677500
566	0.000000	566	45.822000
567	0.000000	567	28.321500
568	0.000000	568	22.812000
569	0.471190	569	0.000000
570	1.060180	570	0.000000
571	0.000000	571	28.320000
572	2.238150	572	0.000000
573	0.353393	573	0.000000
574	2.120360	574	0.000000
575	0.000000	575	19.470000
576	1.766960	576	0.000000
577	0.000000	577	65.446500
578	0.000000	578	301.918500
579	0.000000	579	101.754000
580	0.000000	580	7.234500
581	3.416130	581	0.000000
582	0.000000	582	112.528500
583	0.000000	583	34.494000
584	0.000000	584	59.782500
585	0.000000	585	29.184000
586	0.000000	586	182.112000
587	0.000000	587	60.889500
588	3.298330	588	0.000000
589	0.000000	589	7.279500
590	0.000000	590	73.788000
591	0.000000	591	48.300000
592	1.060180	592	0.000000
593	1.295770	593	0.000000
594	0.000000	594	150.052500
595	0.942381	595	0.000000
596	1.295770	596	0.000000
597	0.000000	597	161.380500
598	1.060180	598	0.000000
599	0.000000	599	26.352000
600	0.000000	600	235.920000

Coordenada x	Valor x	Coordenada z	Valor z
601	0.000000	601	55.933500
602	10.012786	602	0.000000
603	0.000000	603	3.739500
604	0.000000	604	23.520000
605	0.000000	605	149.344500
606	0.000000	606	390.418500
607	0.000000	607	177.510000
608	0.000000	608	67.414500
609	4.829700	609	0.000000
610	0.000000	610	189.700500
611	0.000000	611	34.140000
612	0.000000	612	112.174500
613	0.588988	613	0.000000
614	0.000000	614	131.290500
615	0.000000	615	345.460500
616	0.000000	616	172.554000
617	0.000000	617	36.262500
618	2.238150	618	0.000000
619	0.000000	619	175.894500
620	0.000000	620	30.954000
621	0.000000	621	84.208500
622	0.000000	622	177.310500
623	0.000000	623	387.232500
624	0.000000	624	187.422000
625	0.000000	625	67.768500
626	2.827140	626	0.000000
627	0.000000	627	199.612500
628	0.000000	628	42.636000
629	0.000000	629	112.882500
630	0.000000	630	120.316500
631	0.942381	631	0.000000
632	0.000000	632	184.036500
633	0.000000	633	407.410500
634	0.000000	634	218.574000
635	0.000000	635	100.690500
636	4.947500	636	0.000000
637	0.000000	637	235.720500
638	0.000000	638	64.230000
639	0.000000	639	117.130500
640	0.000000	640	104.032500
641	0.000000	641	350.416500
642	0.000000	642	155.562000
643	0.000000	643	16.792500
644	2.827140	644	0.000000
645	0.000000	645	176.602500
646	0.000000	646	28.476000
647	0.000000	647	68.632500
648	0.000000	648	131.998500
649	0.000000	649	377.320500

Coordenada x	Valor x	Coordenada z	Valor z
650	0.000000	650	179.988000
651	0.000000	651	49.360500
652	4.122910	652	0.000000
653	0.000000	653	194.302500
654	0.000000	654	30.954000
655	0.000000	655	92.704500
656	0.000000	656	127.750500
657	1.295770	657	0.000000
658	0.000000	658	137.308500
659	0.000000	659	396.082500
660	0.000000	660	186.006000
661	0.000000	661	85.114500
662	-0.000000	662	0.000000
663	0.000000	663	219.436500
664	0.000000	664	102.616500
665	0.353393	665	0.000000
666	0.353393	666	0.000000
667	0.471190	667	0.000000
668	0.235595	668	0.000000
669	0.353393	669	0.000000
670	2.355950	670	0.000000
671	0.235595	671	0.000000
672	0.588988	672	0.000000
673	0.353393	673	0.000000
674	0.942381	674	0.000000
675	0.235595	675	0.000000
676	1.531370	676	0.000000
677	1.884760	677	0.000000
678	0.235595	678	0.000000
679	0.471190	679	0.000000
680	0.471190	680	0.000000
681	0.000000	681	142.464000
682	0.000000	682	406.902000
683	0.000000	683	216.295500
684	2.002560	684	0.000000
685	0.000000	685	115.249500
686	0.000000	686	207.954000
687	0.706785	687	0.000000
688	0.000000	688	275.214000
689	0.000000	689	123.702000
690	12.242506	690	0.000000
691	0.000000	691	60.563500
692	0.000000	692	112.020000
693	0.000000	693	24.936000
694	0.000000	694	51.840000
695	0.000000	695	87.948000
696	3.597025	696	0.000000
697	0.000000	697	95.963500
698	0.000000	698	58.212000

Coordenada x	Valor x	Coordenada z	Valor z
699	0.000000	699	15.732000
700	0.000000	700	57.504000
701	0.000000	701	281.586000
702	-0.000000	702	0.000000
703	0.000000	703	20.915500
704	0.000000	704	42.990000
705	0.000000	705	8.298000
706	0.000000	706	162.288000
707	0.000000	707	421.770000
708	0.000000	708	243.000000
709	0.000000	709	163.223500
710	0.000000	710	227.778000
711	0.000000	711	68.478000
712	0.000000	712	173.034500
713	0.000000	713	403.134500
714	0.000000	714	234.276500
715	0.000000	715	77.652500
716	0.000000	716	233.214500
717	0.000000	717	192.888000
718	0.000000	718	120.642500
719	0.189317	719	0.000000
720	1.577640	720	0.000000
721	1.072800	721	0.000000
722	0.252423	722	0.000000
723	0.820374	723	0.000000
724	0.126211	724	0.000000
725	0.441740	725	0.000000
726	-0.000000	726	0.000000
727	0.000000	727	56.640000
728	0.000000	728	39.450000
729	0.000000	729	131.490000
730	0.000000	730	71.310000
731	1.893170	731	0.000000
732	0.000000	732	22.685500
733	0.000000	733	39.096000
734	0.000000	734	11.484000
735	0.000000	735	55.026000
736	0.000000	736	241.230000
737	0.000000	737	135.738000
738	0.567951	738	0.000000
739	0.000000	739	61.625500
740	0.000000	740	85.824000
741	0.000000	741	18.918000
742	0.000000	742	96.642000
743	-0.000000	743	0.000000
744	0.000000	744	2393.911000
745	0.000000	745	2395.681000
746	0.000000	746	2379.397000
747	0.000000	747	130.074000

Coordenada x	Valor x	Coordenada z	Valor z
748	0.000000	748	260.700000
749	0.000000	749	201.582000
750	0.567951	750	0.000000
751	0.000000	751	131.717500
752	0.000000	752	47.946000
753	0.126211	753	0.000000
754	0.126211	754	0.000000
755	0.441740	755	0.000000
756	0.000000	756	2434.975000
757	0.315529	757	0.000000
758	0.000000	758	100.308500
759	0.000000	759	358.728500
760	0.000000	760	175.356500
761	0.000000	761	18.024500
762	1.451430	762	0.000000
763	0.000000	763	147.036500
764	0.000000	764	49.362000
765	0.000000	765	51.456500
766	0.063106	766	0.000000
767	2.208700	767	0.000000
768	0.946586	768	0.000000
769	0.378634	769	0.000000
770	0.378634	770	0.000000
771	0.441740	771	0.000000
772	0.000000	772	2382.583000
773	0.757269	773	0.000000
774	0.000000	774	25.644000
775	0.000000	775	257.160000
776	0.000000	776	105.294000
777	1.766960	777	0.000000
778	0.000000	778	7.109500
779	0.000000	779	102.108000
780	0.000000	780	29.538000
781	0.000000	781	39.804000
782	0.000000	782	221.052000
783	0.000000	783	81.576000
784	2.965970	784	0.000000
785	0.000000	785	39.677500
786	0.000000	786	45.822000
787	0.000000	787	65.321500
788	0.000000	788	22.812000
789	0.315529	789	0.000000
790	0.631057	790	0.000000
791	0.000000	791	28.320000
792	1.199010	792	0.000000
793	0.189317	793	0.000000
794	2.019380	794	0.000000
795	0.000000	795	19.470000
796	1.451430	796	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
797	0.000000	797	58.212000
798	0.000000	798	294.684000
799	0.000000	799	110.604000
800	2.398020	800	0.000000
801	0.000000	801	29.765500
802	0.000000	802	105.294000
803	0.000000	803	64.259500
804	0.000000	804	52.548000
805	0.000000	805	29.184000
806	0.000000	806	182.112000
807	0.000000	807	76.974000
808	1.640750	808	0.000000
809	0.000000	809	44.279500
810	0.000000	810	73.788000
811	0.000000	811	48.300000
812	1.009690	812	0.000000
813	0.820374	813	0.000000
814	0.000000	814	113.052500
815	0.567951	815	0.000000
816	1.199010	816	0.000000
817	0.000000	817	124.380500
818	1.199010	818	0.000000
819	0.000000	819	26.352000
820	0.000000	820	235.920000
821	0.000000	821	72.018000
822	6.373682	822	0.000000
823	0.000000	823	40.739500
824	0.000000	824	23.520000
825	0.000000	825	112.344500
826	0.000000	826	353.418500
827	0.000000	827	156.594500
828	0.000000	828	30.414500
829	4.669820	829	0.000000
830	0.000000	830	152.700500
831	0.000000	831	34.140000
832	0.000000	832	75.174500
833	0.504846	833	0.000000
834	0.000000	834	95.028000
835	0.000000	835	309.198000
836	0.000000	836	152.376000
837	1.514540	837	0.000000
838	0.000000	838	0.737500
839	0.000000	839	139.632000
840	0.000000	840	31.691500
841	0.000000	841	47.946000
842	0.000000	842	140.310500
843	0.000000	843	350.232500
844	0.000000	844	166.506500
845	0.000000	845	30.768500

Coordenada x	Valor x	Coordenada z	Valor z
846	1.388330	846	0.000000
847	0.000000	847	162.612500
848	0.000000	848	42.636000
849	0.000000	849	75.882500
850	0.000000	850	83.316500
851	0.252423	851	0.000000
852	0.000000	852	147.036500
853	0.000000	853	370.410500
854	0.000000	854	197.658500
855	0.000000	855	63.690500
856	3.533920	856	0.000000
857	0.000000	857	198.720500
858	0.000000	858	64.230000
859	0.000000	859	80.130500
860	0.000000	860	87.240000
861	0.000000	861	333.624000
862	0.000000	862	154.854000
863	1.766960	863	0.000000
864	0.000000	864	20.207500
865	0.000000	865	159.810000
866	0.000000	866	48.683500
867	0.000000	867	51.840000
868	0.000000	868	94.998500
869	0.000000	869	340.320500
870	0.000000	870	159.072500
871	0.000000	871	12.360500
872	2.334910	872	0.000000
873	0.000000	873	157.302500
874	0.000000	874	30.954000
875	0.000000	875	55.704500
876	0.000000	876	90.750500
877	0.820374	877	0.000000
878	0.000000	878	100.308500
879	0.000000	879	359.082500
880	0.000000	880	165.090500
881	0.000000	881	48.114500
882	-0.000000	882	0.000000
883	0.000000	883	182.436500
884	0.000000	884	65.616500
885	0.063106	885	0.000000
886	0.126211	886	0.000000
887	0.189317	887	0.000000
888	0.126211	888	0.000000
889	0.252423	889	0.000000
890	1.388330	890	0.000000
891	0.063106	891	0.000000
892	0.441740	892	0.000000
893	0.252423	893	0.000000
894	0.441740	894	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
895	0.315529	895	0.000000
896	0.757269	896	0.000000
897	0.252423	897	0.000000
898	0.063106	898	0.000000
899	0.000000	899	2471.791000
900	0.189317	900	0.000000
901	0.000000	901	142.464000
902	0.000000	902	406.902000
903	0.000000	903	232.380000
904	-0.000000	904	0.000000
905	0.000000	905	152.249500
906	0.000000	906	207.954000
907	0.378634	907	0.000000
908	0.000000	908	310.614000
909	0.000000	909	84.054000
910	0.000000	910	129.720000
911	8.328207	911	0.000000
912	0.000000	912	92.196000
913	0.000000	913	116.622000
914	0.000000	914	16.440000
915	0.000000	915	12.900000
916	0.000000	916	94.320000
917	4.128205	917	0.000000
918	0.000000	918	2.988000
919	0.000000	919	72.018000
920	0.000000	920	97.152000
921	0.000000	921	356.634000
922	0.000000	922	169.368000
923	-0.000000	923	0.000000
924	0.000000	924	62.814000
925	0.000000	925	139.632000
926	0.000000	926	59.628000
927	0.000000	927	354.510000
928	0.000000	928	100.692000
929	0.502564	929	0.000000
930	0.000000	930	105.294000
931	0.000000	931	57.504000
932	0.000000	932	233.598000
933	0.000000	933	499.098000
934	0.000000	934	255.192000
935	0.000000	935	267.936000
936	0.000000	936	273.954000
937	0.000000	937	192.888000
938	0.000000	938	272.892000
939	0.215385	939	0.000000
940	0.969231	940	0.000000
941	0.969231	941	0.000000
942	0.358974	942	0.000000
943	0.969231	943	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
944	0.143590	944	0.000000
945	0.502564	945	0.000000
946	-0.000000	946	0.000000
947	0.000000	947	36.816000
948	0.000000	948	77.328000
949	0.000000	949	204.768000
950	0.000000	950	69.540000
951	0.000000	951	167.598000
952	1.974360	952	0.000000
953	0.000000	953	57.150000
954	0.000000	954	141.048000
955	0.000000	955	53.964000
956	0.000000	956	275.568000
957	0.000000	957	95.028000
958	0.000000	958	128.658000
959	0.682051	959	0.000000
960	0.000000	960	64.938000
961	0.000000	961	109.542000
962	0.000000	962	4.956000
963	-0.000000	963	0.000000
964	0.000000	964	2516.194500
965	0.000000	965	2517.964500
966	0.000000	966	2501.680500
967	0.000000	967	58.920000
968	0.000000	968	224.946000
969	0.000000	969	90.780000
970	0.000000	970	58.566000
971	0.574359	971	0.000000
972	0.000000	972	68.478000
973	0.000000	973	2540.974500
974	0.107692	974	0.000000
975	0.358974	975	0.000000
976	0.000000	976	2557.258500
977	0.502564	977	0.000000
978	0.000000	978	160.872000
979	0.000000	979	454.692000
980	0.000000	980	196.272000
981	0.000000	981	208.308000
982	0.251282	982	0.000000
983	0.000000	983	187.776000
984	0.000000	984	49.362000
985	0.000000	985	203.706000
986	0.071795	986	0.000000
987	0.000000	987	2569.294500
988	0.933333	988	0.000000
989	0.000000	989	2517.256500
990	0.466667	990	0.000000
991	0.143590	991	0.000000
992	0.000000	992	2504.866500

Coordenada x	Valor x	Coordenada z	Valor z
993	0.394872	993	0.000000
994	0.000000	994	79.098000
995	0.000000	995	346.014000
996	0.000000	996	119.100000
997	0.000000	997	183.174000
998	1.076920	998	0.000000
999	0.000000	999	135.738000
1000	0.000000	1000	174.678000
1001	0.000000	1001	60.690000
1002	0.000000	1002	277.338000
1003	0.000000	1003	62.814000
1004	0.000000	1004	150.606000
1005	0.682051	1005	0.000000
1006	0.000000	1006	46.884000
1007	0.000000	1007	25.644000
1008	0.000000	1008	135.384000
1009	0.394872	1009	0.000000
1010	-0.000000	1010	0.000000
1011	0.000000	1011	8.496000
1012	0.897436	1012	0.000000
1013	0.251282	1013	0.000000
1014	0.000000	1014	0.354000
1015	1.292310	1015	0.000000
1016	0.610256	1016	0.000000
1017	0.000000	1017	89.010000
1018	0.000000	1018	360.882000
1019	0.000000	1019	101.754000
1020	0.000000	1020	160.518000
1021	1.256410	1021	0.000000
1022	0.000000	1022	116.268000
1023	0.000000	1023	34.494000
1024	0.000000	1024	175.032000
1025	0.000000	1025	45.468000
1026	0.000000	1026	233.796000
1027	0.000000	1027	53.610000
1028	0.000000	1028	146.004000
1029	1.076920	1029	0.000000
1030	0.000000	1030	70.248000
1031	0.000000	1031	156.270000
1032	0.717949	1032	0.000000
1033	0.753846	1033	0.000000
1034	0.000000	1034	173.616000
1035	0.071795	1035	0.000000
1036	0.789744	1036	0.000000
1037	0.000000	1037	184.944000
1038	0.179487	1038	0.000000
1039	0.000000	1039	46.176000
1040	0.000000	1040	291.144000
1041	0.000000	1041	52.194000

Coordenada x	Valor x	Coordenada z	Valor z
1042	0.000000	1042	149.544000
1043	5.887182	1043	0.000000
1044	0.000000	1044	135.030000
1045	0.000000	1045	172.908000
1046	0.000000	1046	449.382000
1047	0.000000	1047	177.510000
1048	0.000000	1048	220.698000
1049	0.717949	1049	0.000000
1050	0.000000	1050	193.440000
1051	0.000000	1051	34.140000
1052	0.000000	1052	227.424000
1053	0.538462	1053	0.000000
1054	0.000000	1054	154.854000
1055	0.000000	1055	404.424000
1056	0.000000	1056	172.554000
1057	0.000000	1057	189.546000
1058	1.076920	1058	0.000000
1059	0.000000	1059	179.634000
1060	0.000000	1060	30.954000
1061	0.000000	1061	199.458000
1062	0.000000	1062	200.874000
1063	0.000000	1063	446.196000
1064	0.000000	1064	187.422000
1065	0.000000	1065	221.052000
1066	0.574359	1066	0.000000
1067	0.000000	1067	203.352000
1068	0.000000	1068	42.636000
1069	0.000000	1069	228.132000
1070	0.000000	1070	143.880000
1071	0.179487	1071	0.000000
1072	0.000000	1072	207.600000
1073	0.000000	1073	466.374000
1074	0.000000	1074	218.574000
1075	0.000000	1075	253.974000
1076	2.010260	1076	0.000000
1077	0.000000	1077	239.460000
1078	0.000000	1078	64.230000
1079	0.000000	1079	232.380000
1080	0.000000	1080	127.596000
1081	0.000000	1081	409.380000
1082	0.000000	1082	155.562000
1083	0.000000	1083	170.076000
1084	0.215385	1084	0.000000
1085	0.000000	1085	180.342000
1086	0.000000	1086	28.476000
1087	0.000000	1087	183.882000
1088	0.000000	1088	155.562000
1089	0.000000	1089	436.284000
1090	0.000000	1090	179.988000

Coordenada x	Valor x	Coordenada z	Valor z
1091	0.000000	1091	202.644000
1092	0.179487	1092	0.000000
1093	0.000000	1093	198.042000
1094	0.000000	1094	30.954000
1095	0.000000	1095	207.954000
1096	0.000000	1096	151.314000
1097	0.574359	1097	0.000000
1098	0.000000	1098	160.872000
1099	0.000000	1099	455.046000
1100	0.000000	1100	186.006000
1101	0.000000	1101	238.398000
1102	-0.000000	1102	0.000000
1103	0.000000	1103	223.176000
1104	0.000000	1104	217.866000
1105	0.143590	1105	0.000000
1106	0.179487	1106	0.000000
1107	0.251282	1107	0.000000
1108	0.179487	1108	0.000000
1109	0.287180	1109	0.000000
1110	0.682051	1110	0.000000
1111	0.107692	1111	0.000000
1112	0.538462	1112	0.000000
1113	0.215385	1113	0.000000
1114	0.287180	1114	0.000000
1115	0.430769	1115	0.000000
1116	0.789744	1116	0.000000
1117	0.358974	1117	0.000000
1118	0.143590	1118	0.000000
1119	0.000000	1119	2594.074500
1120	0.179487	1120	0.000000
1121	0.000000	1121	50.778000
1122	0.000000	1122	350.616000
1123	0.000000	1123	101.046000
1124	0.000000	1124	38.034000
1125	-0.000000	1125	0.000000
1126	0.000000	1126	96.444000
1127	0.502564	1127	0.000000
1128	0.000000	1128	275.214000
1129	0.000000	1129	123.702000
1130	19.633339	1130	0.000000
1131	0.000000	1131	75.563500
1132	0.000000	1132	112.020000
1133	0.000000	1133	24.936000
1134	0.000000	1134	51.840000
1135	0.000000	1135	87.948000
1136	11.780010	1136	0.000000
1137	0.000000	1137	110.963500
1138	0.000000	1138	58.212000
1139	0.000000	1139	15.732000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
1140	0.000000	1140	57.504000
1141	0.000000	1141	281.586000
1142	-0.000000	1142	0.000000
1143	0.000000	1143	35.915500
1144	0.000000	1144	42.990000
1145	0.000000	1145	8.298000
1146	0.000000	1146	162.288000
1147	0.000000	1147	421.770000
1148	0.000000	1148	243.000000
1149	0.000000	1149	178.223500
1150	0.000000	1150	227.778000
1151	0.000000	1151	68.478000
1152	0.000000	1152	130.974500
1153	0.000000	1153	361.074500
1154	0.000000	1154	192.216500
1155	0.000000	1155	35.592500
1156	0.000000	1156	191.154500
1157	0.000000	1157	165.828000
1158	0.000000	1158	78.582500
1159	0.392667	1159	0.000000
1160	2.094220	1160	0.000000
1161	1.570670	1161	0.000000
1162	0.523556	1162	0.000000
1163	1.439780	1163	0.000000
1164	1.178000	1164	0.000000
1165	0.785333	1165	0.000000
1166	0.785333	1166	0.000000
1167	0.000000	1167	56.640000
1168	0.000000	1168	39.450000
1169	0.000000	1169	131.490000
1170	0.000000	1170	71.310000
1171	2.356000	1171	0.000000
1172	0.000000	1172	37.685500
1173	0.000000	1173	39.096000
1174	0.000000	1174	11.484000
1175	0.000000	1175	55.026000
1176	0.000000	1176	241.230000
1177	0.000000	1177	135.738000
1178	2.879560	1178	0.000000
1179	0.000000	1179	76.625500
1180	0.000000	1180	85.824000
1181	0.000000	1181	18.918000
1182	0.000000	1182	96.642000
1183	2.748670	1183	0.000000
1184	1.308890	1184	0.000000
1185	1.178000	1185	0.000000
1186	1.701560	1186	0.000000
1187	0.000000	1187	130.074000
1188	0.000000	1188	260.700000

Coordenada x	Valor x	Coordenada z	Valor z
1189	0.000000	1189	201.582000
1190	3.795780	1190	0.000000
1191	0.000000	1191	146.717500
1192	0.000000	1192	47.946000
1193	0.916222	1193	0.000000
1194	1.178000	1194	0.000000
1195	1.701560	1195	0.000000
1196	0.392667	1196	0.000000
1197	0.523556	1197	0.000000
1198	0.000000	1198	85.308500
1199	0.000000	1199	343.728500
1200	0.000000	1200	160.356500
1201	0.000000	1201	3.024500
1202	1.963330	1202	0.000000
1203	0.000000	1203	132.036500
1204	0.000000	1204	49.362000
1205	0.000000	1205	36.456500
1206	1.047110	1206	0.000000
1207	3.141330	1207	0.000000
1208	0.916222	1208	0.000000
1209	2.094220	1209	0.000000
1210	1.701560	1210	0.000000
1211	2.356000	1211	0.000000
1212	1.178000	1212	0.000000
1213	0.654444	1213	0.000000
1214	0.000000	1214	25.644000
1215	0.000000	1215	257.160000
1216	0.000000	1216	105.294000
1217	2.617780	1217	0.000000
1218	0.000000	1218	22.109500
1219	0.000000	1219	102.108000
1220	0.000000	1220	29.538000
1221	0.000000	1221	39.804000
1222	0.000000	1222	221.052000
1223	0.000000	1223	81.576000
1224	5.497330	1224	0.000000
1225	0.000000	1225	54.677500
1226	0.000000	1226	45.822000
1227	0.000000	1227	80.321500
1228	0.000000	1228	22.812000
1229	0.654444	1229	0.000000
1230	1.963330	1230	0.000000
1231	0.000000	1231	28.320000
1232	1.570670	1232	0.000000
1233	0.392667	1233	0.000000
1234	2.094220	1234	0.000000
1235	0.000000	1235	19.470000
1236	1.963330	1236	0.000000
1237	0.000000	1237	58.212000

Coordenada x	Valor x	Coordenada z	Valor z
1238	0.000000	1238	294.684000
1239	0.000000	1239	110.604000
1240	2.879560	1240	0.000000
1241	0.000000	1241	44.765500
1242	0.000000	1242	105.294000
1243	0.000000	1243	79.259500
1244	0.000000	1244	52.548000
1245	0.000000	1245	29.184000
1246	0.000000	1246	182.112000
1247	0.000000	1247	76.974000
1248	2.748670	1248	0.000000
1249	0.000000	1249	59.279500
1250	0.000000	1250	73.788000
1251	0.000000	1251	48.300000
1252	1.439780	1252	0.000000
1253	1.178000	1253	0.000000
1254	0.000000	1254	98.052500
1255	1.047110	1255	0.000000
1256	1.701560	1256	0.000000
1257	0.000000	1257	109.380500
1258	2.356000	1258	0.000000
1259	0.000000	1259	26.352000
1260	0.000000	1260	235.920000
1261	0.000000	1261	72.018000
1262	9.424006	1262	0.000000
1263	0.000000	1263	55.739500
1264	0.000000	1264	23.520000
1265	0.000000	1265	97.344500
1266	0.000000	1266	338.418500
1267	0.000000	1267	141.594500
1268	0.000000	1268	15.414500
1269	6.282670	1269	0.000000
1270	0.000000	1270	137.700500
1271	0.000000	1271	34.140000
1272	0.000000	1272	60.174500
1273	0.392667	1273	0.000000
1274	0.000000	1274	95.028000
1275	0.000000	1275	309.198000
1276	0.000000	1276	152.376000
1277	2.094220	1277	0.000000
1278	0.000000	1278	15.737500
1279	0.000000	1279	139.632000
1280	0.000000	1280	46.691500
1281	0.000000	1281	47.946000
1282	0.000000	1282	125.310500
1283	0.000000	1283	335.232500
1284	0.000000	1284	151.506500
1285	0.000000	1285	15.768500
1286	2.879560	1286	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
1287	0.000000	1287	147.612500
1288	0.000000	1288	42.636000
1289	0.000000	1289	60.882500
1290	0.000000	1290	68.316500
1291	1.308890	1291	0.000000
1292	0.000000	1292	132.036500
1293	0.000000	1293	355.410500
1294	0.000000	1294	182.658500
1295	0.000000	1295	48.690500
1296	4.712000	1296	0.000000
1297	0.000000	1297	183.720500
1298	0.000000	1298	64.230000
1299	0.000000	1299	65.130500
1300	0.000000	1300	87.240000
1301	0.000000	1301	333.624000
1302	0.000000	1302	154.854000
1303	3.534000	1303	0.000000
1304	0.000000	1304	35.207500
1305	0.000000	1305	159.810000
1306	0.000000	1306	63.683500
1307	0.000000	1307	51.840000
1308	0.000000	1308	82.638000
1309	0.000000	1309	327.960000
1310	0.000000	1310	146.712000
1311	6.413550	1311	0.000000
1312	0.000000	1312	2.639500
1313	0.000000	1313	144.942000
1314	0.000000	1314	33.593500
1315	0.000000	1315	43.344000
1316	0.000000	1316	75.750500
1317	1.308890	1317	0.000000
1318	0.000000	1318	85.308500
1319	0.000000	1319	344.082500
1320	0.000000	1320	150.090500
1321	0.000000	1321	33.114500
1322	-0.000000	1322	0.000000
1323	0.000000	1323	167.436500
1324	0.000000	1324	50.616500
1325	0.523556	1325	0.000000
1326	0.654444	1326	0.000000
1327	0.654444	1327	0.000000
1328	0.261778	1328	0.000000
1329	0.392667	1329	0.000000
1330	2.748670	1330	0.000000
1331	0.392667	1331	0.000000
1332	0.523556	1332	0.000000
1333	0.392667	1333	0.000000
1334	1.308890	1334	0.000000
1335	0.261778	1335	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
1336	1.570670	1336	0.000000
1337	2.225110	1337	0.000000
1338	0.261778	1338	0.000000
1339	0.523556	1339	0.000000
1340	0.392667	1340	0.000000
1341	0.000000	1341	142.464000
1342	0.000000	1342	406.902000
1343	0.000000	1343	232.380000
1344	2.748670	1344	0.000000
1345	0.000000	1345	167.249500
1346	0.000000	1346	207.954000
1347	0.654444	1347	0.000000
1348	0.000000	1348	279.420000
1349	0.000000	1349	125.340000
1350	22.215486	1350	0.000000
1351	0.000000	1351	54.360000
1352	0.000000	1352	113.460000
1353	0.000000	1353	24.900000
1354	0.000000	1354	52.260000
1355	0.000000	1355	88.980000
1356	9.221521	1356	0.000000
1357	0.000000	1357	90.360000
1358	0.000000	1358	58.740000
1359	0.000000	1359	15.540000
1360	0.000000	1360	58.020000
1361	0.000000	1361	285.900000
1362	-0.000000	1362	0.000000
1363	0.000000	1363	14.040000
1364	0.000000	1364	43.260000
1365	0.000000	1365	7.980000
1366	0.000000	1366	164.580000
1367	0.000000	1367	428.460000
1368	0.000000	1368	246.660000
1369	0.000000	1369	158.760000
1370	0.000000	1370	231.180000
1371	0.000000	1371	69.180000
1372	0.000000	1372	155.220000
1373	0.000000	1373	389.220000
1374	0.000000	1374	217.500000
1375	0.000000	1375	58.680000
1376	0.000000	1376	216.420000
1377	0.000000	1377	168.180000
1378	0.000000	1378	101.940000
1379	0.419160	1379	0.000000
1380	2.654680	1380	0.000000
1381	1.536920	1381	0.000000
1382	0.419160	1382	0.000000
1383	1.676640	1383	0.000000
1384	1.257480	1384	0.000000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
1385	0.978041	1385	0.000000
1386	0.978041	1386	0.000000
1387	0.000000	1387	57.600000
1388	0.000000	1388	39.660000
1389	0.000000	1389	133.260000
1390	0.000000	1390	72.060000
1391	3.073840	1391	0.000000
1392	0.000000	1392	15.840000
1393	0.000000	1393	39.300000
1394	0.000000	1394	11.220000
1395	0.000000	1395	55.500000
1396	0.000000	1396	244.860000
1397	0.000000	1397	137.580000
1398	3.073840	1398	0.000000
1399	0.000000	1399	55.440000
1400	0.000000	1400	86.820000
1401	0.000000	1401	18.780000
1402	0.000000	1402	98.280000
1403	2.794400	1403	0.000000
1404	1.257480	1404	0.000000
1405	1.397200	1405	0.000000
1406	2.235520	1406	0.000000
1407	0.000000	1407	131.820000
1408	0.000000	1408	264.660000
1409	0.000000	1409	204.540000
1410	4.051880	1410	0.000000
1411	0.000000	1411	126.720000
1412	0.000000	1412	48.300000
1413	0.838321	1413	0.000000
1414	1.257480	1414	0.000000
1415	2.375240	1415	0.000000
1416	0.279440	1416	0.000000
1417	0.558881	1417	0.000000
1418	0.000000	1418	108.780000
1419	0.000000	1419	371.580000
1420	0.000000	1420	185.100000
1421	0.000000	1421	25.560000
1422	2.235520	1422	0.000000
1423	0.000000	1423	156.300000
1424	0.000000	1424	49.740000
1425	0.000000	1425	59.100000
1426	0.698601	1426	0.000000
1427	3.353280	1427	0.000000
1428	1.257480	1428	0.000000
1429	2.095800	1429	0.000000
1430	1.676640	1430	0.000000
1431	2.934120	1431	0.000000
1432	1.257480	1432	0.000000
1433	0.978041	1433	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
1434	0.000000	1434	25.620000
1435	0.000000	1435	261.060000
1436	0.000000	1436	106.620000
1437	3.532504	1437	0.000000
1438	0.239936	1438	0.000000
1439	0.000000	1439	103.380000
1440	0.000000	1440	29.580000
1441	0.000000	1441	40.020000
1442	0.000000	1442	224.340000
1443	0.000000	1443	82.500000
1444	6.287410	1444	0.000000
1445	0.000000	1445	33.120000
1446	0.000000	1446	46.140000
1447	0.000000	1447	58.740000
1448	0.000000	1448	22.740000
1449	0.698601	1449	0.000000
1450	1.816360	1450	0.000000
1451	0.000000	1451	28.800000
1452	2.934120	1452	0.000000
1453	0.558881	1453	0.000000
1454	2.654680	1454	0.000000
1455	0.000000	1455	19.800000
1456	2.235520	1456	0.000000
1457	0.000000	1457	58.740000
1458	0.000000	1458	299.220000
1459	0.000000	1459	112.020000
1460	3.912160	1460	0.000000
1461	0.000000	1461	23.040000
1462	0.000000	1462	106.620000
1463	0.000000	1463	57.660000
1464	0.000000	1464	52.980000
1465	0.000000	1465	29.220000
1466	0.000000	1466	184.740000
1467	0.000000	1467	77.820000
1468	3.073840	1468	0.000000
1469	0.000000	1469	37.800000
1470	0.000000	1470	74.580000
1471	0.000000	1471	48.660000
1472	0.978041	1472	0.000000
1473	1.257480	1473	0.000000
1474	0.000000	1474	121.740000
1475	1.536920	1475	0.000000
1476	2.514960	1476	0.000000
1477	0.000000	1477	133.260000
1478	1.536920	1478	0.000000
1479	0.000000	1479	26.340000
1480	0.000000	1480	239.460000
1481	0.000000	1481	72.780000
1482	11.596763	1482	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
1483	0.000000	1483	34.200000
1484	0.000000	1484	23.460000
1485	0.000000	1485	121.020000
1486	0.000000	1486	366.180000
1487	0.000000	1487	166.020000
1488	0.000000	1488	38.160000
1489	8.942090	1489	0.000000
1490	0.000000	1490	162.060000
1491	0.000000	1491	34.260000
1492	0.000000	1492	83.220000
1493	0.838321	1493	0.000000
1494	0.000000	1494	102.660000
1495	0.000000	1495	320.460000
1496	0.000000	1496	160.980000
1497	0.000000	1497	6.480000
1498	3.912160	1498	0.000000
1499	0.000000	1499	148.020000
1500	0.000000	1500	31.020000
1501	0.000000	1501	54.780000
1502	0.000000	1502	149.460000
1503	0.000000	1503	362.940000
1504	0.000000	1504	176.100000
1505	0.000000	1505	38.520000
1506	4.191600	1506	0.000000
1507	0.000000	1507	172.140000
1508	0.000000	1508	42.900000
1509	0.000000	1509	83.940000
1510	0.000000	1510	91.500000
1511	1.117760	1511	0.000000
1512	0.000000	1512	156.300000
1513	0.000000	1513	383.460000
1514	0.000000	1514	207.780000
1515	0.000000	1515	72.000000
1516	6.566850	1516	0.000000
1517	0.000000	1517	208.860000
1518	0.000000	1518	64.860000
1519	0.000000	1519	88.260000
1520	0.000000	1520	88.260000
1521	0.000000	1521	338.820000
1522	0.000000	1522	157.020000
1523	1.536920	1523	0.000000
1524	0.000000	1524	13.320000
1525	0.000000	1525	162.060000
1526	0.000000	1526	41.820000
1527	0.000000	1527	52.260000
1528	0.000000	1528	103.380000
1529	0.000000	1529	352.860000
1530	0.000000	1530	168.540000
1531	0.000000	1531	19.800000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
1532	5.169650	1532	0.000000
1533	0.000000	1533	166.740000
1534	0.000000	1534	31.020000
1535	0.000000	1535	63.420000
1536	0.000000	1536	99.060000
1537	1.816360	1537	0.000000
1538	0.000000	1538	108.780000
1539	0.000000	1539	371.940000
1540	0.000000	1540	174.660000
1541	0.000000	1541	56.160000
1542	-0.000000	1542	0.000000
1543	0.000000	1543	192.300000
1544	0.000000	1544	73.500000
1545	0.419160	1545	0.000000
1546	0.279440	1546	0.000000
1547	0.279440	1547	0.000000
1548	0.279440	1548	0.000000
1549	0.419160	1549	0.000000
1550	2.654680	1550	0.000000
1551	0.139720	1551	0.000000
1552	0.558881	1552	0.000000
1553	0.279440	1553	0.000000
1554	0.279440	1554	0.000000
1555	0.139720	1555	0.000000
1556	1.397200	1556	0.000000
1557	1.397200	1557	0.000000
1558	0.139720	1558	0.000000
1559	0.419160	1559	0.000000
1560	0.419160	1560	0.000000
1561	0.000000	1561	144.420000
1562	0.000000	1562	413.340000
1563	0.000000	1563	235.860000
1564	2.794400	1564	0.000000
1565	0.000000	1565	147.600000
1566	0.000000	1566	211.020000
1567	0.698601	1567	0.000000
1568	0.000000	1568	275.214000
1569	0.000000	1569	123.702000
1570	-0.000000	1570	0.000000
1571	0.000000	1571	40.601334
1572	0.000000	1572	112.020000
1573	0.000000	1573	24.936000
1574	0.000000	1574	51.840000
1575	0.000000	1575	87.948000
1576	-0.000000	1576	0.000000
1577	0.000000	1577	76.001334
1578	0.000000	1578	58.212000
1579	0.000000	1579	15.732000
1580	0.000000	1580	57.504000

Coordenada x	Valor x	Coordenada z	Valor z
1581	0.000000	1581	281.586000
1582	-0.000000	1582	0.000000
1583	0.000000	1583	0.953334
1584	0.000000	1584	42.990000
1585	0.000000	1585	8.298000
1586	0.000000	1586	162.288000
1587	0.000000	1587	421.770000
1588	0.000000	1588	243.000000
1589	0.000000	1589	143.261334
1590	0.000000	1590	227.778000
1591	0.000000	1591	68.478000
1592	0.000000	1592	192.996666
1593	0.000000	1593	423.096666
1594	0.000000	1594	254.238666
1595	0.000000	1595	97.614666
1596	0.000000	1596	253.176666
1597	0.000000	1597	192.888000
1598	0.000000	1598	140.604666
1599	0.000000	1599	2244.638000
1600	0.000000	1600	2181.626000
1601	0.000000	1601	2197.556000
1602	0.000000	1602	2223.044000
1603	0.000000	1603	2294.198000
1604	0.000000	1604	2211.716000
1605	0.000000	1605	2205.344000
1606	-0.000000	1606	0.000000
1607	0.000000	1607	56.640000
1608	0.000000	1608	2281.454000
1609	0.000000	1609	2373.494000
1610	0.000000	1610	2313.314000
1611	0.000000	1611	2242.004000
1612	0.000000	1612	2244.727334
1613	0.000000	1613	2281.100000
1614	0.000000	1614	2253.488000
1615	0.000000	1615	2230.124000
1616	0.000000	1616	2416.328000
1617	0.000000	1617	2310.836000
1618	0.000000	1618	2175.098000
1619	0.000000	1619	2216.761334
1620	0.000000	1620	2260.922000
1621	0.000000	1621	2194.016000
1622	0.000000	1622	96.642000
1623	-0.000000	1623	0.000000
1624	0.000000	1624	2128.016000
1625	0.000000	1625	2129.786000
1626	0.000000	1626	2113.502000
1627	0.000000	1627	2316.854000
1628	0.000000	1628	2447.480000
1629	0.000000	1629	2388.362000

Coordenada x	Valor x	Coordenada z	Valor z
1630	0.000000	1630	2186.780000
1631	0.000000	1631	2298.535334
1632	0.000000	1632	2234.726000
1633	0.000000	1633	2152.796000
1634	0.000000	1634	2132.618000
1635	0.000000	1635	2468.366000
1636	0.000000	1636	2169.080000
1637	0.000000	1637	2309.420000
1638	0.000000	1638	120.270666
1639	0.000000	1639	378.690666
1640	0.000000	1640	195.318666
1641	0.000000	1641	37.986666
1642	0.844995	1642	0.000000
1643	0.000000	1643	166.998666
1644	0.000000	1644	49.362000
1645	0.000000	1645	71.418666
1646	0.000000	1646	2143.946000
1647	0.027554	1647	0.000000
1648	0.000000	1648	2213.486000
1649	0.000000	1649	2129.078000
1650	0.000000	1650	2458.808000
1651	0.000000	1651	2148.194000
1652	0.000000	1652	2116.688000
1653	0.000000	1653	2253.488000
1654	0.000000	1654	2206.760000
1655	0.000000	1655	2438.276000
1656	0.000000	1656	2286.410000
1657	0.000000	1657	2181.116000
1658	0.000000	1658	2168.263334
1659	0.000000	1659	2283.224000
1660	0.000000	1660	2210.654000
1661	0.000000	1661	2222.336000
1662	0.000000	1662	2403.584000
1663	0.000000	1663	2264.108000
1664	0.000000	1664	2182.532000
1665	0.000000	1665	2202.247334
1666	0.000000	1666	2228.354000
1667	0.000000	1667	2227.891334
1668	0.000000	1668	2205.344000
1669	0.000000	1669	2220.212000
1670	-0.000000	1670	0.000000
1671	0.000000	1671	28.320000
1672	0.000000	1672	2249.948000
1673	0.000000	1673	2206.052000
1674	-0.000000	1674	0.000000
1675	0.000000	1675	19.470000
1676	0.000000	1676	2246.054000
1677	0.000000	1677	58.212000
1678	0.000000	1678	294.684000

Coordenada x	Valor x	Coordenada z	Valor z
1679	0.000000	1679	110.604000
1680	0.128586	1680	0.000000
1681	0.000000	1681	9.803334
1682	0.000000	1682	105.294000
1683	0.000000	1683	44.297334
1684	0.000000	1684	52.548000
1685	0.000000	1685	2260.922000
1686	0.000000	1686	2413.850000
1687	0.000000	1687	2308.712000
1688	0.000000	1688	2231.738000
1689	0.000000	1689	2256.055334
1690	0.000000	1690	2305.526000
1691	0.000000	1691	2280.038000
1692	0.000000	1692	2213.132000
1693	0.000000	1693	2207.822000
1694	0.000000	1694	133.014666
1695	0.018370	1695	0.000000
1696	0.000000	1696	2259.506000
1697	0.000000	1697	144.342666
1698	-0.000000	1698	0.000000
1699	0.000000	1699	26.352000
1700	0.000000	1700	235.920000
1701	0.000000	1701	72.018000
1702	-0.000000	1702	0.000000
1703	0.000000	1703	20.777334
1704	0.000000	1704	23.520000
1705	0.000000	1705	132.306666
1706	0.000000	1706	373.380666
1707	0.000000	1707	176.556666
1708	0.000000	1708	50.376666
1709	2.746230	1709	0.000000
1710	0.000000	1710	172.662666
1711	0.000000	1711	34.140000
1712	0.000000	1712	95.136666
1713	0.000000	1713	2239.682000
1714	0.000000	1714	114.252666
1715	0.000000	1715	328.422666
1716	0.000000	1716	171.600666
1717	0.000000	1717	19.224666
1718	0.413313	1718	0.000000
1719	0.000000	1719	158.856666
1720	0.000000	1720	30.954000
1721	0.000000	1721	67.170666
1722	0.000000	1722	160.272666
1723	0.000000	1723	370.194666
1724	0.000000	1724	186.468666
1725	0.000000	1725	50.730666
1726	0.854180	1726	0.000000
1727	0.000000	1727	182.574666

Coordenada x	Valor x	Coordenada z	Valor z
1728	0.000000	1728	42.636000
1729	0.000000	1729	95.844666
1730	0.000000	1730	103.278666
1731	-0.000000	1731	0.000000
1732	0.000000	1732	166.998666
1733	0.000000	1733	390.372666
1734	0.000000	1734	217.620666
1735	0.000000	1735	83.652666
1736	3.049330	1736	0.000000
1737	0.000000	1737	218.682666
1738	0.000000	1738	64.230000
1739	0.000000	1739	100.092666
1740	0.000000	1740	87.240000
1741	0.000000	1741	333.624000
1742	0.000000	1742	154.854000
1743	0.679670	1743	0.000000
1744	0.000000	1744	0.245334
1745	0.000000	1745	159.810000
1746	0.000000	1746	28.721334
1747	0.000000	1747	51.840000
1748	0.000000	1748	114.960666
1749	0.000000	1749	360.282666
1750	0.000000	1750	179.034666
1751	0.000000	1751	32.322666
1752	0.128586	1752	0.000000
1753	0.000000	1753	177.264666
1754	0.000000	1754	30.954000
1755	0.000000	1755	75.666666
1756	0.000000	1756	110.712666
1757	-0.000000	1757	0.000000
1758	0.000000	1758	120.270666
1759	0.000000	1759	379.044666
1760	0.000000	1760	185.052666
1761	0.000000	1761	68.076666
1762	-0.000000	1762	0.000000
1763	0.000000	1763	202.398666
1764	0.000000	1764	85.578666
1765	0.000000	1765	2425.886000
1766	0.000000	1766	2408.894000
1767	0.000000	1767	2399.336000
1768	0.000000	1768	2458.808000
1769	0.000000	1769	2395.442000
1770	0.000000	1770	2352.962000
1771	0.000000	1771	2509.430000
1772	0.000000	1772	2322.518000
1773	0.000000	1773	2391.548000
1774	0.000000	1774	2513.324000
1775	0.000000	1775	2459.162000
1776	0.000000	1776	2328.182000

Coordenada x	Valor x	Coordenada z	Valor z
1777	0.000000	1777	2473.676000
1778	0.000000	1778	2412.434000
1779	0.000000	1779	2205.896000
1780	0.000000	1780	2433.674000
1781	0.000000	1781	142.464000
1782	0.000000	1782	406.902000
1783	0.000000	1783	232.380000
1784	-0.000000	1784	0.000000
1785	0.000000	1785	132.287334
1786	0.000000	1786	207.954000
1787	0.000000	1787	2385.176000
1788	-0.000000	1788	0.000000
1789	0.000000	1789	136.506000
1790	0.000000	1790	17.064713
1791	0.000000	1791	45.368000
1792	0.000000	1792	78.402000
1793	0.000000	1793	41.736713
1794	0.000000	1794	360.978000
1795	0.000000	1795	402.366000
1796	0.000000	1796	323.122713
1797	0.000000	1797	391.226000
1798	0.000000	1798	323.964000
1799	0.000000	1799	337.446713
1800	0.000000	1800	60.496000
1801	0.000000	1801	6.372000
1802	0.000000	1802	16.272713
1803	-0.000000	1803	0.000000
1804	-0.000000	1804	0.000000
1805	0.000000	1805	22.238713
1806	0.000000	1806	162.031287
1807	0.000000	1807	147.707287
1808	0.000000	1808	253.567287
1809	0.000000	1809	143.723287
1810	0.000000	1810	191.483287
1811	0.000000	1811	73.626000
1812	0.000000	1812	210.538000
1813	0.000000	1813	163.180000
1814	0.000000	1814	280.184000
1815	0.000000	1815	123.728713
1816	0.000000	1816	234.020000
1817	0.000000	1817	210.136000
1818	0.000000	1818	168.698713
1819	0.000000	1819	2412.783787
1820	0.000000	1820	2341.939787
1821	0.000000	1821	2359.849787
1822	0.000000	1822	2388.505787
1823	0.000000	1823	2424.325787
1824	0.000000	1824	2375.769787
1825	0.000000	1825	2368.605787

Coordenada x	Valor x	Coordenada z	Valor z
1826	-0.000000	1826	0.000000
1827	0.000000	1827	19.502000
1828	0.000000	1828	2454.175787
1829	0.000000	1829	2251.597787
1830	0.000000	1830	2490.787787
1831	0.000000	1831	2430.250500
1832	0.000000	1832	2415.967787
1833	0.000000	1833	2409.599787
1834	0.000000	1834	2439.798500
1835	0.000000	1835	2396.465787
1836	0.000000	1836	2299.755787
1837	0.000000	1837	2488.001787
1838	0.000000	1838	2355.028500
1839	0.000000	1839	2384.525787
1840	0.000000	1840	2386.913787
1841	0.000000	1841	2372.934500
1842	0.000000	1842	91.589287
1843	-0.000000	1843	0.000000
1844	0.000000	1844	2302.094500
1845	0.000000	1845	2304.084500
1846	0.000000	1846	2285.776500
1847	0.000000	1847	2493.975787
1848	0.000000	1848	2334.779787
1849	0.000000	1849	2575.163787
1850	0.000000	1850	2368.162500
1851	0.000000	1851	2476.463787
1852	0.000000	1852	2418.704500
1853	0.000000	1853	2329.954500
1854	0.000000	1854	2307.268500
1855	0.000000	1855	2358.261787
1856	0.000000	1856	2348.262500
1857	0.000000	1857	2441.439787
1858	0.000000	1858	132.136000
1859	0.000000	1859	116.618000
1860	0.000000	1860	217.304000
1861	0.000000	1861	60.052713
1862	1.599280	1862	0.000000
1863	0.000000	1863	140.494000
1864	0.000000	1864	52.134000
1865	0.000000	1865	94.276713
1866	0.000000	1866	2320.004500
1867	0.089560	1867	0.000000
1868	0.000000	1868	2377.759787
1869	0.000000	1869	2303.288500
1870	0.000000	1870	2347.515787
1871	0.000000	1871	2324.780500
1872	0.000000	1872	2289.358500
1873	0.000000	1873	2378.555787
1874	0.000000	1874	2370.197787

Coordenada x	Valor x	Coordenada z	Valor z
1875	0.000000	1875	2324.431787
1876	0.000000	1876	2460.539787
1877	0.000000	1877	2361.794500
1878	0.000000	1878	2329.999787
1879	0.000000	1879	2411.987787
1880	0.000000	1880	2391.640500
1881	0.000000	1881	2387.709787
1882	0.000000	1882	2285.427787
1883	0.000000	1883	2435.465787
1884	0.000000	1884	2363.386500
1885	0.000000	1885	2368.207787
1886	0.000000	1886	2350.297787
1887	0.000000	1887	2393.675787
1888	0.000000	1888	2385.670500
1889	0.000000	1889	2385.321787
1890	0.000000	1890	12.338000
1891	-0.000000	1891	0.000000
1892	0.000000	1892	2374.575787
1893	0.000000	1893	2369.401787
1894	0.000000	1894	22.288000
1895	-0.000000	1895	0.000000
1896	0.000000	1896	2370.197787
1897	0.000000	1897	2402.037787
1898	0.000000	1898	2361.843787
1899	0.000000	1899	2461.733787
1900	0.000000	1900	2357.018500
1901	0.000000	1901	2350.695787
1902	0.000000	1902	2410.793787
1903	0.000000	1903	2386.113787
1904	0.000000	1904	2412.734500
1905	0.000000	1905	2431.091787
1906	0.000000	1906	2296.969787
1907	0.000000	1907	2485.613787
1908	0.000000	1908	2418.708500
1909	0.000000	1909	2428.703787
1910	0.000000	1910	2437.061787
1911	0.000000	1911	2469.648500
1912	0.000000	1912	2377.361787
1913	0.000000	1913	2371.391787
1914	0.000000	1914	146.464000
1915	0.268680	1915	0.000000
1916	0.000000	1916	2429.499787
1917	0.000000	1917	159.200000
1918	-0.000000	1918	0.000000
1919	0.000000	1919	70.442000
1920	-0.000000	1920	0.000000
1921	0.000000	1921	122.576000
1922	0.000000	1922	61.242713
1923	0.000000	1923	67.258000

Coordenada x	Valor x	Coordenada z	Valor z
1924	0.000000	1924	84.322713
1925	0.000000	1925	145.668000
1926	0.000000	1926	110.648000
1927	0.000000	1927	196.210000
1928	0.000000	1928	73.982713
1929	1.074720	1929	0.000000
1930	0.000000	1930	146.862000
1931	0.000000	1931	35.020000
1932	0.000000	1932	120.942713
1933	0.000000	1933	2407.211787
1934	0.000000	1934	125.370000
1935	0.000000	1935	60.102000
1936	0.000000	1936	190.638000
1937	0.000000	1937	38.958713
1938	0.498976	1938	0.000000
1939	0.000000	1939	131.340000
1940	0.000000	1940	31.438000
1941	0.000000	1941	89.500713
1942	0.000000	1942	177.110000
1943	0.000000	1943	107.066000
1944	0.000000	1944	207.354000
1945	0.000000	1945	74.380713
1946	2.904300	1946	0.000000
1947	0.000000	1947	158.006000
1948	0.000000	1948	44.572000
1949	0.000000	1949	121.738713
1950	0.000000	1950	113.032000
1951	0.038383	1951	0.000000
1952	0.000000	1952	184.672000
1953	0.000000	1953	129.752000
1954	0.000000	1954	242.378000
1955	0.000000	1955	111.394713
1956	4.196520	1956	0.000000
1957	0.000000	1957	198.602000
1958	0.000000	1958	68.850000
1959	0.000000	1959	126.514713
1960	0.000000	1960	2415.569787
1961	0.000000	1961	2386.519787
1962	0.000000	1962	2492.379787
1963	0.000000	1963	2337.914500
1964	0.000000	1964	2320.845787
1965	0.000000	1965	2452.981787
1966	0.000000	1966	2349.497787
1967	0.000000	1967	2392.834500
1968	0.000000	1968	126.166000
1969	0.000000	1969	95.922000
1970	0.000000	1970	198.996000
1971	0.000000	1971	53.684713
1972	1.458550	1972	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
1973	0.000000	1973	152.036000
1974	0.000000	1974	31.438000
1975	0.000000	1975	99.052713
1976	0.000000	1976	121.390000
1977	-0.000000	1977	0.000000
1978	0.000000	1978	132.136000
1979	0.000000	1979	117.016000
1980	0.000000	1980	205.762000
1981	0.000000	1981	93.882713
1982	-0.000000	1982	0.000000
1983	0.000000	1983	180.294000
1984	0.000000	1984	110.196713
1985	0.000000	1985	2310.501787
1986	0.000000	1986	2291.397787
1987	0.000000	1987	2280.651787
1988	0.000000	1988	2347.515787
1989	0.000000	1989	2276.273787
1990	0.000000	1990	2490.393787
1991	0.000000	1991	2404.429787
1992	0.000000	1992	2456.165787
1993	0.000000	1993	2271.895787
1994	0.000000	1994	2408.807787
1995	0.000000	1995	2347.913787
1996	0.000000	1996	2506.711787
1997	0.000000	1997	2364.231787
1998	0.000000	1998	2295.377787
1999	0.000000	1999	2389.654500
2000	0.000000	2000	2319.257787
2001	0.000000	2001	139.743287
2002	0.000000	2002	130.991287
2003	0.000000	2003	241.627287
2004	-0.000000	2004	0.000000
2005	0.000000	2005	131.385287
2006	0.000000	2006	169.195287
2007	0.000000	2007	2264.731787
2008	0.000000	2008	977.728000
2009	0.000000	2009	268.608000
2010	0.000000	2010	411.540000
2011	0.516506	2011	0.000000
2012	0.000000	2012	294.092000
2013	0.000000	2013	370.544000
2014	0.000000	2014	56.980000
2015	0.000000	2015	45.900000
2016	0.000000	2016	300.740000
2017	1.198297	2017	0.000000
2018	0.000000	2018	14.876000
2019	0.000000	2019	230.936000
2020	0.000000	2020	309.604000
2021	0.000000	2021	1121.768000

Coordenada x	Valor x	Coordenada z	Valor z
2022	0.000000	2022	535.636000
2023	-0.000000	2023	0.000000
2024	0.000000	2024	202.128000
2025	0.000000	2025	442.564000
2026	0.000000	2026	192.156000
2027	0.000000	2027	1115.120000
2028	0.000000	2028	320.684000
2029	1.022683	2029	0.000000
2030	0.000000	2030	335.088000
2031	0.000000	2031	185.508000
2032	0.000000	2032	742.196000
2033	0.000000	2033	1573.196000
2034	0.000000	2034	809.784000
2035	0.000000	2035	849.672000
2036	0.000000	2036	868.508000
2037	0.000000	2037	614.776000
2038	0.000000	2038	865.184000
2039	0.020660	2039	0.000000
2040	0.020660	2040	0.000000
2041	0.030990	2041	0.000000
2042	0.030990	2042	0.000000
2043	0.092971	2043	0.000000
2044	0.000000	2044	6944.854134
2045	0.010330	2045	0.000000
2046	-0.000000	2046	0.000000
2047	0.000000	2047	115.232000
2048	0.000000	2048	247.556000
2049	0.000000	2049	646.436000
2050	0.000000	2050	223.180000
2051	0.000000	2051	530.096000
2052	0.123962	2052	0.000000
2053	0.000000	2053	184.400000
2054	0.000000	2054	446.996000
2055	0.000000	2055	174.428000
2056	0.000000	2056	868.036000
2057	0.000000	2057	302.956000
2058	0.000000	2058	408.216000
2059	0.061981	2059	0.000000
2060	0.000000	2060	208.776000
2061	0.000000	2061	348.384000
2062	0.000000	2062	15.512000
2063	-0.000000	2063	0.000000
2064	0.000000	2064	7088.894134
2065	0.092971	2065	0.000000
2066	0.072311	2066	0.000000
2067	0.000000	2067	189.940000
2068	0.000000	2068	709.592000
2069	0.000000	2069	289.660000
2070	0.000000	2070	188.832000

Coordenada x	Valor x	Coordenada z	Valor z
2071	0.144622	2071	0.000000
2072	0.000000	2072	219.856000
2073	0.061981	2073	0.000000
2074	0.051651	2074	0.000000
2075	0.123962	2075	0.000000
2076	0.000000	2076	7217.422134
2077	0.041321	2077	0.000000
2078	0.000000	2078	509.044000
2079	0.000000	2079	1428.684000
2080	0.000000	2080	619.844000
2081	0.000000	2081	657.516000
2082	0.258253	2082	0.000000
2083	0.000000	2083	593.252000
2084	0.000000	2084	160.024000
2085	0.000000	2085	643.112000
2086	0.020660	2086	0.000000
2087	0.092971	2087	0.000000
2088	0.030990	2088	0.000000
2089	0.196273	2089	0.000000
2090	0.206603	2090	0.000000
2091	0.320234	2091	0.000000
2092	0.010330	2092	0.000000
2093	0.030990	2093	0.000000
2094	0.000000	2094	253.096000
2095	0.000000	2095	1088.528000
2096	0.000000	2096	378.300000
2097	0.000000	2097	578.848000
2098	0.103301	2098	0.000000
2099	0.000000	2099	430.376000
2100	0.000000	2100	552.256000
2101	0.000000	2101	195.480000
2102	0.000000	2102	873.576000
2103	0.000000	2103	202.128000
2104	0.000000	2104	476.912000
2105	0.630138	2105	0.000000
2106	0.000000	2106	152.268000
2107	0.000000	2107	85.788000
2108	0.000000	2108	429.268000
2109	0.010330	2109	0.000000
2110	0.010330	2110	0.000000
2111	0.000000	2111	26.592000
2112	0.041321	2112	0.000000
2113	0.000000	2113	6927.126134
2114	0.000000	2114	1.108000
2115	0.123962	2115	0.000000
2116	0.051651	2116	0.000000
2117	0.000000	2117	284.120000
2118	0.000000	2118	1135.064000
2119	0.000000	2119	324.008000

Coordenada x	Valor x	Coordenada z	Valor z
2120	0.000000	2120	507.936000
2121	0.206603	2121	0.000000
2122	0.000000	2122	369.436000
2123	0.000000	2123	113.488000
2124	0.000000	2124	553.364000
2125	0.000000	2125	147.836000
2126	0.000000	2126	737.292000
2127	0.000000	2127	173.320000
2128	0.000000	2128	462.508000
2129	0.144622	2129	0.000000
2130	0.000000	2130	225.396000
2131	0.000000	2131	494.640000
2132	0.010330	2132	0.000000
2133	0.010330	2133	0.000000
2134	0.000000	2134	548.932000
2135	0.113632	2135	0.000000
2136	0.185942	2136	0.000000
2137	0.000000	2137	584.388000
2138	0.258253	2138	0.000000
2139	0.000000	2139	150.052000
2140	0.000000	2140	916.788000
2141	0.000000	2141	168.888000
2142	0.000000	2142	473.588000
2143	0.702449	2143	0.000000
2144	0.000000	2144	428.160000
2145	0.000000	2145	546.716000
2146	0.000000	2146	1412.064000
2147	0.000000	2147	561.120000
2148	0.000000	2148	696.296000
2149	0.423536	2149	0.000000
2150	0.000000	2150	610.980000
2151	0.000000	2151	112.380000
2152	0.000000	2152	717.348000
2153	0.041321	2153	0.000000
2154	0.000000	2154	490.208000
2155	0.000000	2155	1271.348000
2156	0.000000	2156	545.608000
2157	0.000000	2157	598.792000
2158	0.165282	2158	0.000000
2159	0.000000	2159	567.768000
2160	0.000000	2160	102.408000
2161	0.000000	2161	629.816000
2162	0.000000	2162	634.248000
2163	0.000000	2163	1402.092000
2164	0.000000	2164	592.144000
2165	0.000000	2165	697.404000
2166	0.185942	2166	0.000000
2167	0.000000	2167	642.004000
2168	0.000000	2168	138.972000

Coordenada x	Valor x	Coordenada z	Valor z
2169	0.000000	2169	719.564000
2170	0.000000	2170	455.860000
2171	0.020660	2171	0.000000
2172	0.000000	2172	655.300000
2173	0.000000	2173	1465.248000
2174	0.000000	2174	689.648000
2175	0.000000	2175	800.448000
2176	0.795421	2176	0.000000
2177	0.000000	2177	755.020000
2178	0.000000	2178	206.560000
2179	0.000000	2179	732.860000
2180	0.000000	2180	404.892000
2181	0.000000	2181	1286.860000
2182	0.000000	2182	492.424000
2183	0.000000	2183	537.852000
2184	0.578488	2184	0.000000
2185	0.000000	2185	569.984000
2186	0.000000	2186	94.652000
2187	0.000000	2187	581.064000
2188	0.000000	2188	492.424000
2189	0.000000	2189	1371.068000
2190	0.000000	2190	568.876000
2191	0.000000	2191	639.788000
2192	1.911080	2192	0.000000
2193	0.000000	2193	625.384000
2194	0.000000	2194	102.408000
2195	0.000000	2195	656.408000
2196	0.000000	2196	479.128000
2197	0.134292	2197	0.000000
2198	0.000000	2198	509.044000
2199	0.000000	2199	1429.792000
2200	0.000000	2200	587.712000
2201	0.000000	2201	751.696000
2202	-0.000000	2202	0.000000
2203	0.000000	2203	704.052000
2204	0.000000	2204	687.432000
2205	0.020660	2205	0.000000
2206	0.082641	2206	0.000000
2207	0.000000	2207	7642.894134
2208	0.092971	2208	0.000000
2209	0.082641	2209	0.000000
2210	0.258253	2210	0.000000
2211	0.041321	2211	0.000000
2212	0.061981	2212	0.000000
2213	0.030990	2213	0.000000
2214	0.000000	2214	7999.670134
2215	0.082641	2215	0.000000
2216	0.082641	2216	0.000000
2217	0.227263	2217	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
2218	0.010330	2218	0.000000
2219	0.000000	2219	7332.654134
2220	0.144622	2220	0.000000
2221	0.000000	2221	164.456000
2222	0.000000	2222	1102.932000
2223	0.000000	2223	321.792000
2224	0.000000	2224	124.568000
2225	-0.000000	2225	0.000000
2226	0.000000	2226	307.388000
2227	0.030990	2227	0.000000
2228	0.000000	2228	411.592000
2229	0.000000	2229	183.896000
2230	2.253427	2230	0.000000
2231	0.000000	2231	205.708000
2232	0.000000	2232	166.340000
2233	0.000000	2233	35.468000
2234	0.000000	2234	75.900000
2235	0.000000	2235	130.164000
2236	0.674102	2236	0.000000
2237	0.000000	2237	258.908000
2238	0.000000	2238	85.476000
2239	0.000000	2239	21.636000
2240	0.000000	2240	84.412000
2241	0.000000	2241	421.168000
2242	-0.000000	2242	0.000000
2243	0.000000	2243	146.124000
2244	0.000000	2244	62.600000
2245	0.000000	2245	10.464000
2246	0.000000	2246	280.544000
2247	0.000000	2247	670.500000
2248	0.000000	2248	401.840000
2249	0.000000	2249	398.648000
2250	0.000000	2250	378.964000
2251	0.000000	2251	139.564000
2252	0.000000	2252	141.336000
2253	0.000000	2253	487.136000
2254	0.000000	2254	233.372000
2255	1.348205	2255	0.000000
2256	0.000000	2256	231.776000
2257	0.000000	2257	243.480000
2258	0.000000	2258	62.600000
2259	0.019260	2259	0.000000
2260	0.211861	2260	0.000000
2261	0.173341	2261	0.000000
2262	0.019260	2262	0.000000
2263	0.173341	2263	0.000000
2264	0.115560	2264	0.000000
2265	0.057780	2265	0.000000
2266	0.019260	2266	0.000000

Continua na próxima página

Coordenada x	Valor x	Coordenada z	Valor z
2267	0.000000	2267	85.120000
2268	0.000000	2268	57.280000
2269	0.000000	2269	195.600000
2270	0.000000	2270	105.160000
2271	0.442982	2271	0.000000
2272	0.000000	2272	148.784000
2273	0.000000	2273	56.748000
2274	0.000000	2274	15.252000
2275	0.000000	2275	80.688000
2276	0.000000	2276	360.520000
2277	0.000000	2277	201.984000
2278	0.346681	2278	0.000000
2279	0.000000	2279	207.304000
2280	0.000000	2280	126.972000
2281	0.000000	2281	26.424000
2282	0.000000	2282	145.236000
2283	0.154081	2283	0.000000
2284	0.096300	2284	0.000000
2285	0.192601	2285	0.000000
2286	0.211861	2286	0.000000
2287	0.000000	2287	193.472000
2288	0.000000	2288	389.780000
2289	0.000000	2289	300.936000
2290	0.269641	2290	0.000000
2291	0.000000	2291	312.640000
2292	0.000000	2292	70.048000
2293	0.057780	2293	0.000000
2294	0.134820	2294	0.000000
2295	0.057780	2295	0.000000
2296	0.000000	2296	3545.640000
2297	0.096300	2297	0.000000
2298	0.000000	2298	121.652000
2299	0.000000	2299	510.012000
2300	0.000000	2300	234.436000
2301	0.520022	2301	0.000000
2302	0.000000	2302	87.604000
2303	0.000000	2303	191.876000
2304	0.000000	2304	117.396000
2305	0.000000	2305	48.236000
2306	0.077040	2306	0.000000
2307	0.154081	2307	0.000000
2308	0.134820	2308	0.000000
2309	0.173341	2309	0.000000
2310	0.115560	2310	0.000000
2311	0.096300	2311	0.000000
2312	0.077040	2312	0.000000
2313	0.308161	2313	0.000000
2314	0.000000	2314	36.532000
2315	0.000000	2315	384.460000

Coordenada x	Valor x	Coordenada z	Valor z
2316	0.000000	2316	156.232000
2317	0.635582	2317	0.000000
2318	0.000000	2318	125.376000
2319	0.000000	2319	151.444000
2320	0.000000	2320	42.384000
2321	0.000000	2321	57.812000
2322	0.000000	2322	330.196000
2323	0.000000	2323	120.588000
2324	0.808923	2324	0.000000
2325	0.000000	2325	174.320000
2326	0.000000	2326	66.856000
2327	0.000000	2327	168.468000
2328	0.000000	2328	32.276000
2329	0.038520	2329	0.000000
2330	0.211861	2330	0.000000
2331	0.000000	2331	42.560000
2332	0.250381	2332	0.000000
2333	0.038520	2333	0.000000
2334	0.442982	2334	0.000000
2335	0.000000	2335	29.260000
2336	0.481502	2336	0.000000
2337	0.000000	2337	85.476000
2338	0.000000	2338	440.852000
2339	0.000000	2339	164.212000
2340	0.520022	2340	0.000000
2341	0.000000	2341	159.424000
2342	0.000000	2342	156.232000
2343	0.000000	2343	166.872000
2344	0.000000	2344	76.964000
2345	0.000000	2345	41.852000
2346	0.000000	2346	271.676000
2347	0.000000	2347	113.672000
2348	0.751143	2348	0.000000
2349	0.000000	2349	181.236000
2350	0.000000	2350	108.884000
2351	0.000000	2351	70.580000
2352	0.096300	2352	0.000000
2353	0.096300	2353	0.000000
2354	0.000000	2354	53.200000
2355	0.269641	2355	0.000000
2356	0.308161	2356	0.000000
2357	0.000000	2357	70.224000
2358	0.654842	2358	0.000000
2359	0.000000	2359	37.596000
2360	0.000000	2360	352.540000
2361	0.000000	2361	106.224000
2362	1.752667	2362	0.000000
2363	0.000000	2363	175.916000
2364	0.000000	2364	33.340000

Coordenada x	Valor x	Coordenada z	Valor z
2365	0.000000	2365	121.120000
2366	0.000000	2366	483.412000
2367	0.000000	2367	187.620000
2368	1.945270	2368	0.000000
2369	0.000000	2369	68.984000
2370	0.000000	2370	181.768000
2371	0.000000	2371	75.900000
2372	0.000000	2372	65.260000
2373	0.134820	2373	0.000000
2374	0.000000	2374	140.804000
2375	0.000000	2375	462.664000
2376	0.000000	2376	226.988000
2377	0.423721	2377	0.000000
2378	0.000000	2378	115.800000
2379	0.000000	2379	207.836000
2380	0.000000	2380	117.928000
2381	0.000000	2381	70.048000
2382	0.000000	2382	162.616000
2383	0.000000	2383	478.092000
2384	0.000000	2384	201.984000
2385	0.847443	2385	0.000000
2386	0.000000	2386	68.452000
2387	0.000000	2387	196.132000
2388	0.000000	2388	88.136000
2389	0.000000	2389	65.792000
2390	0.000000	2390	8.512000
2391	0.173341	2391	0.000000
2392	0.000000	2392	123.248000
2393	0.000000	2393	458.940000
2394	0.000000	2394	199.324000
2395	1.001520	2395	0.000000
2396	0.000000	2396	18.976000
2397	0.000000	2397	200.920000
2398	0.000000	2398	71.112000
2399	0.000000	2399	22.700000
2400	0.000000	2400	129.100000
2401	0.000000	2401	499.372000
2402	0.000000	2402	230.712000
2403	0.635582	2403	0.000000
2404	0.000000	2404	145.060000
2405	0.000000	2405	238.160000
2406	0.000000	2406	143.464000
2407	0.000000	2407	75.900000
2408	0.000000	2408	122.184000
2409	0.000000	2409	490.860000
2410	0.000000	2410	218.476000
2411	1.097820	2411	0.000000
2412	0.000000	2412	96.116000
2413	0.000000	2413	215.816000

Coordenada x	Valor x	Coordenada z	Valor z
2414	0.000000	2414	98.244000
2415	0.000000	2415	63.132000
2416	0.000000	2416	19.684000
2417	0.250381	2417	0.000000
2418	0.000000	2418	76.432000
2419	0.000000	2419	465.324000
2420	0.000000	2420	173.788000
2421	-0.000000	2421	0.000000
2422	0.000000	2422	42.384000
2423	0.000000	2423	199.856000
2424	0.000000	2424	24.296000
2425	0.019260	2425	0.000000
2426	0.038520	2426	0.000000
2427	0.038520	2427	0.000000
2428	0.019260	2428	0.000000
2429	0.057780	2429	0.000000
2430	0.346681	2430	0.000000
2431	0.019260	2431	0.000000
2432	0.096300	2432	0.000000
2433	0.077040	2433	0.000000
2434	0.000000	2434	4060.972000
2435	0.038520	2435	0.000000
2436	0.134820	2436	0.000000
2437	0.115560	2437	0.000000
2438	0.000000	2438	3909.352000
2439	0.000000	2439	3600.968000
2440	0.019260	2440	0.000000
2441	0.000000	2441	212.092000
2442	0.000000	2442	609.496000
2443	0.000000	2443	347.220000
2444	0.154081	2444	0.000000
2445	0.000000	2445	343.496000
2446	0.000000	2446	310.512000
2447	0.057780	2447	0.000000
2448	0.000000	2448	411.592000
2449	0.000000	2449	183.896000
2450	1.510881	2450	0.000000
2451	0.000000	2451	205.708000
2452	0.000000	2452	166.340000
2453	0.000000	2453	35.468000
2454	0.000000	2454	75.900000
2455	0.000000	2455	130.164000
2456	0.373057	2456	0.000000
2457	0.000000	2457	258.908000
2458	0.000000	2458	85.476000
2459	0.000000	2459	21.636000
2460	0.000000	2460	84.412000
2461	0.000000	2461	421.168000
2462	-0.000000	2462	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
2463	0.000000	2463	146.124000
2464	0.000000	2464	62.600000
2465	0.000000	2465	10.464000
2466	0.000000	2466	241.884000
2467	0.000000	2467	631.840000
2468	0.000000	2468	363.180000
2469	0.000000	2469	359.988000
2470	0.000000	2470	340.304000
2471	0.000000	2471	100.904000
2472	0.000000	2472	141.336000
2473	0.000000	2473	487.136000
2474	0.000000	2474	233.372000
2475	0.149223	2475	0.000000
2476	0.000000	2476	231.776000
2477	0.000000	2477	243.480000
2478	0.000000	2478	62.600000
2479	0.080829	2479	0.000000
2480	0.341969	2480	0.000000
2481	0.174093	2481	0.000000
2482	0.024871	2482	0.000000
2483	0.000000	2483	3729.664000
2484	0.049741	2484	0.000000
2485	0.136788	2485	0.000000
2486	0.018653	2486	0.000000
2487	0.000000	2487	85.120000
2488	0.000000	2488	57.280000
2489	0.000000	2489	195.600000
2490	0.000000	2490	105.160000
2491	0.254922	2491	0.000000
2492	0.000000	2492	148.784000
2493	0.000000	2493	56.748000
2494	0.000000	2494	15.252000
2495	0.000000	2495	80.688000
2496	0.000000	2496	360.520000
2497	0.000000	2497	201.984000
2498	0.341969	2498	0.000000
2499	0.000000	2499	207.304000
2500	0.000000	2500	126.972000
2501	0.000000	2501	26.424000
2502	0.000000	2502	145.236000
2503	0.087047	2503	0.000000
2504	0.000000	2504	3481.928000
2505	0.037306	2505	0.000000
2506	0.000000	2506	3460.116000
2507	0.000000	2507	193.472000
2508	0.000000	2508	389.780000
2509	0.000000	2509	300.936000
2510	0.124352	2510	0.000000
2511	0.000000	2511	312.640000

Coordenada x	Valor x	Coordenada z	Valor z
2512	0.000000	2512	70.048000
2513	0.105699	2513	0.000000
2514	0.031088	2514	0.000000
2515	0.000000	2515	3991.408000
2516	0.012435	2516	0.000000
2517	0.024871	2517	0.000000
2518	0.000000	2518	121.652000
2519	0.000000	2519	510.012000
2520	0.000000	2520	234.436000
2521	0.087047	2521	0.000000
2522	0.000000	2522	87.604000
2523	0.000000	2523	191.876000
2524	0.000000	2524	117.396000
2525	0.000000	2525	48.236000
2526	0.074611	2526	0.000000
2527	0.037306	2527	0.000000
2528	0.087047	2528	0.000000
2529	0.149223	2529	0.000000
2530	0.000000	2530	3977.044000
2531	0.037306	2531	0.000000
2532	0.043523	2532	0.000000
2533	0.037306	2533	0.000000
2534	0.000000	2534	36.532000
2535	0.000000	2535	384.460000
2536	0.000000	2536	156.232000
2537	0.080829	2537	0.000000
2538	0.000000	2538	125.376000
2539	0.000000	2539	151.444000
2540	0.000000	2540	42.384000
2541	0.000000	2541	57.812000
2542	0.000000	2542	330.196000
2543	0.000000	2543	120.588000
2544	0.435233	2544	0.000000
2545	0.000000	2545	174.320000
2546	0.000000	2546	66.856000
2547	0.000000	2547	168.468000
2548	0.000000	2548	32.276000
2549	0.118135	2549	0.000000
2550	0.062176	2550	0.000000
2551	0.000000	2551	42.560000
2552	0.149223	2552	0.000000
2553	0.105699	2553	0.000000
2554	0.062176	2554	0.000000
2555	0.000000	2555	29.260000
2556	0.143005	2556	0.000000
2557	0.000000	2557	3640.820000
2558	0.000000	2558	3996.196000
2559	0.000000	2559	3719.556000
2560	0.000000	2560	3555.344000

Coordenada x	Valor x	Coordenada z	Valor z
2561	0.000000	2561	3714.768000
2562	0.000000	2562	3711.576000
2563	0.000000	2563	3722.216000
2564	0.000000	2564	3632.308000
2565	0.000000	2565	3679.656000
2566	0.000000	2566	3909.480000
2567	0.000000	2567	3751.476000
2568	0.000000	2568	3637.804000
2569	0.000000	2569	3819.040000
2570	0.000000	2570	3746.688000
2571	0.000000	2571	3708.384000
2572	0.043523	2572	0.000000
2573	0.043523	2573	0.000000
2574	0.000000	2574	53.200000
2575	0.031088	2575	0.000000
2576	0.099482	2576	0.000000
2577	0.000000	2577	70.224000
2578	-0.000000	2578	0.000000
2579	0.000000	2579	37.596000
2580	0.000000	2580	352.540000
2581	0.000000	2581	106.224000
2582	0.864248	2582	0.000000
2583	0.000000	2583	175.916000
2584	0.000000	2584	33.340000
2585	0.000000	2585	121.120000
2586	0.000000	2586	483.412000
2587	0.000000	2587	187.620000
2588	0.012435	2588	0.000000
2589	0.000000	2589	68.984000
2590	0.000000	2590	181.768000
2591	0.000000	2591	75.900000
2592	0.000000	2592	65.260000
2593	0.031088	2593	0.000000
2594	0.000000	2594	140.804000
2595	0.000000	2595	462.664000
2596	0.000000	2596	226.988000
2597	0.068394	2597	0.000000
2598	0.000000	2598	115.800000
2599	0.000000	2599	207.836000
2600	0.000000	2600	117.928000
2601	0.000000	2601	70.048000
2602	0.000000	2602	3756.796000
2603	0.000000	2603	4072.272000
2604	0.000000	2604	3796.164000
2605	0.000000	2605	3594.180000
2606	0.000000	2606	3662.632000
2607	0.000000	2607	3790.312000
2608	0.000000	2608	3682.316000
2609	0.000000	2609	3659.972000

Coordenada x	Valor x	Coordenada z	Valor z
2610	0.000000	2610	8.512000
2611	0.043523	2611	0.000000
2612	0.000000	2612	123.248000
2613	0.000000	2613	458.940000
2614	0.000000	2614	199.324000
2615	0.715026	2615	0.000000
2616	0.000000	2616	18.976000
2617	0.000000	2617	200.920000
2618	0.000000	2618	71.112000
2619	0.000000	2619	22.700000
2620	0.000000	2620	129.100000
2621	0.000000	2621	499.372000
2622	0.000000	2622	230.712000
2623	0.074611	2623	0.000000
2624	0.000000	2624	145.060000
2625	0.000000	2625	238.160000
2626	0.000000	2626	143.464000
2627	0.000000	2627	75.900000
2628	0.000000	2628	122.184000
2629	0.000000	2629	490.860000
2630	0.000000	2630	218.476000
2631	0.074611	2631	0.000000
2632	0.000000	2632	96.116000
2633	0.000000	2633	215.816000
2634	0.000000	2634	98.244000
2635	0.000000	2635	63.132000
2636	0.000000	2636	19.684000
2637	0.074611	2637	0.000000
2638	0.000000	2638	76.432000
2639	0.000000	2639	465.324000
2640	0.000000	2640	173.788000
2641	-0.000000	2641	0.000000
2642	0.000000	2642	42.384000
2643	0.000000	2643	199.856000
2644	0.000000	2644	24.296000
2645	0.000000	2645	3927.568000
2646	0.136788	2646	0.000000
2647	0.000000	2647	3887.668000
2648	0.000000	2648	3977.044000
2649	0.037306	2649	0.000000
2650	0.478756	2650	0.000000
2651	0.000000	2651	4053.120000
2652	0.031088	2652	0.000000
2653	0.049741	2653	0.000000
2654	0.000000	2654	4058.972000
2655	0.024871	2655	0.000000
2656	0.031088	2656	0.000000
2657	0.024871	2657	0.000000
2658	0.000000	2658	3907.352000

Coordenada x	Valor x	Coordenada z	Valor z
2659	0.000000	2659	3598.968000
2660	0.099482	2660	0.000000
2661	0.000000	2661	212.092000
2662	0.000000	2662	609.496000
2663	0.000000	2663	347.220000
2664	0.087047	2664	0.000000
2665	0.000000	2665	343.496000
2666	0.000000	2666	310.512000
2667	0.000000	2667	3866.388000
2668	2.232798	2668	0.000000
2669	30.271218	2669	0.000000
2670	17.787432	2670	0.000000
2671	12.053189	2671	0.000000
2672	8.328207	2672	0.000000
2673	19.633339	2673	0.000000
2674	22.215486	2674	0.000000
2675	-0.000000	2675	0.000000
2676	-0.000000	2676	0.000000
2677	0.495846	2677	0.000000
2678	2.253427	2678	0.000000
2679	1.510881	2679	0.000000
2680	0.144051	2680	0.000000
2681	13.759640	2681	0.000000
2682	10.248388	2682	0.000000
2683	3.533919	2683	0.000000
2684	4.092308	2684	0.000000
2685	11.780010	2685	0.000000
2686	9.221521	2686	0.000000
2687	-0.000000	2687	0.000000
2688	-0.000000	2688	0.000000
2689	1.177636	2689	0.000000
2690	0.674102	2690	0.000000
2691	0.373057	2691	0.000000
2692	-0.000000	2692	0.000000
2693	-0.000000	2693	0.000000
2694	-0.000000	2694	0.000000
2695	-0.000000	2695	0.000000
2696	-0.000000	2696	0.000000
2697	-0.000000	2697	0.000000
2698	-0.000000	2698	0.000000
2699	-0.000000	2699	0.000000
2700	-0.000000	2700	0.000000
2701	-0.000000	2701	0.000000
2702	-0.000000	2702	0.000000
2703	-0.000000	2703	0.000000
2704	-0.000000	2704	0.000000
2705	0.000000	2705	27.060000
2706	0.000000	2706	27.060000
2707	0.000000	2707	27.060000

Coordenada x	Valor x	Coordenada z	Valor z
2708	0.323077	2708	0.000000
2709	0.000000	2709	27.060000
2710	0.000000	2710	27.060000
2711	0.000000	2711	27.060000
2712	0.000000	2712	27.060000
2713	0.919382	2713	0.000000
2714	-0.000000	2714	0.000000
2715	0.000000	2715	38.660000
2716	-0.000000	2716	0.000000
2717	0.000000	2717	27.060000
2718	0.000000	2718	27.060000
2719	-0.000000	2719	0.000000
2720	-0.000000	2720	0.000000
2721	0.000000	2721	27.060000
2722	0.000000	2722	27.060000
2723	-0.000000	2723	0.000000
2724	-0.000000	2724	0.000000
2725	-0.000000	2725	0.000000
2726	1.348205	2726	0.000000
2727	0.149223	2727	0.000000
2728	1.560557	2728	0.000000
2729	13.576176	2729	0.000000
2730	10.012786	2730	0.000000
2731	6.373682	2731	0.000000
2732	5.887182	2732	0.000000
2733	9.424006	2733	0.000000
2734	11.596763	2734	0.000000
2735	-0.000000	2735	0.000000
2736	-0.000000	2736	0.000000
2737	0.702449	2737	0.000000
2738	1.752667	2738	0.000000
2739	0.864248	2739	0.000000
2740	-0.000000	2740	0.000000
2741	-0.000000	2741	0.000000
2742	-0.000000	2742	0.000000
2743	-0.000000	2743	0.000000
2744	-0.000000	2744	0.000000
2745	-0.000000	2745	0.000000
2746	-0.000000	2746	0.000000
2747	-0.000000	2747	0.000000
2748	-0.000000	2748	0.000000
2749	-0.000000	2749	0.000000
2750	-0.000000	2750	0.000000
2751	-0.000000	2751	0.000000
2752	-0.000000	2752	0.000000
2753	4.036160	2753	0.000000
2754	2.002560	2754	0.000000
2755	-0.000000	2755	0.000000
2756	-0.000000	2756	0.000000

Coordenada x	Valor x	Coordenada z	Valor z
2757	2.748670	2757	0.000000
2758	2.794400	2758	0.000000
2759	-0.000000	2759	0.000000
2760	-0.000000	2760	0.000000
2761	-0.000000	2761	0.000000
2762	0.154081	2762	0.000000
2763	0.087047	2763	0.000000

3 Variáveis Duais (Multiplicadores de Lagrange)

Tabela 2: Variáveis duais do problema ship12s

Coordenada y	Valor y
1	-0.000000
2	-0.000000
3	-0.000000
4	-0.000000
5	-0.000000
6	-0.000000
7	-0.000000
8	-0.000000
9	-0.000000
10	-0.000000
11	-0.000000
12	-0.000000
13	-65200.000000
14	-42213.653413
15	-0.000000
16	-0.000000
17	-0.000000
18	-0.000000
19	-0.000000
20	-0.000000
21	-0.000000
22	-0.000000
23	-0.000000
24	-27.060000
25	-27.060000
26	-27.060000
27	-27.060000
28	-27.060000
29	-27.060000
30	-27.060000
31	-27.060000
32	-27.060000
33	-27.060000

Coordenada y	Valor y
34	-27.060000
35	-0.000000
36	-0.000000
37	-27.060000
38	-27.060000
39	-27.060000
40	-27.060000
41	-27.060000
42	-27.060000
43	-0.000000
44	-0.000000
45	-27.060000
46	-27.060000
47	-27.060000
48	-27.060000
49	-27.060000
50	-27.060000
51	-0.000000
52	-27.060000
53	-27.060000
54	-27.060000
55	-27.060000
56	-27.060000
57	-27.060000
58	-27.060000
59	-27.060000
60	-27.060000
61	-27.060000
62	-27.060000
63	-27.060000
64	-27.060000
65	-27.060000
66	-27.060000
67	-0.000000
68	-0.000000
69	-27.060000
70	-27.060000
71	-27.060000
72	-27.060000
73	-27.060000
74	-27.060000
75	-0.000000
76	-0.000000
77	-27.060000
78	-27.060000
79	-27.060000
80	-27.060000
81	-27.060000
82	-27.060000

Coordenada y	Valor y
83	-0.000000
84	-27.060000
85	-27.060000
86	-27.060000
87	-27.060000
88	-27.060000
89	-27.060000
90	-27.060000
91	-0.000000
92	-27.060000
93	-27.060000
94	-27.060000
95	-27.060000
96	-90.220000
97	-90.220000
98	-90.220000
99	-90.220000
100	-90.220000
101	-90.220000
102	-90.220000
103	-90.220000
104	-38.660000
105	-38.660000
106	-38.660000
107	-38.660000
108	-38.660000
109	-38.660000
110	-38.660000
111	-38.660000
112	-38.660000
113	-38.660000
114	-38.660000
115	-0.000000
116	-38.660000
117	-38.660000
118	-38.660000
119	-38.660000
120	2491.590500
121	2670.006500
122	2508.228500
123	2520.618500
124	2380.632500
125	-0.000000
126	2526.084500
127	2542.014500
128	-0.000000
129	-0.000000
130	-0.000000
131	-0.000000

Coordenada y	Valor y
132	-0.000000
133	2568.918500
134	-0.000000
135	-0.000000
136	2567.148500
137	-0.000000
138	-0.000000
139	-0.000000
140	-0.000000
141	-0.000000
142	-0.000000
143	-0.000000
144	-0.000000
145	-0.000000
146	-0.000000
147	2443.800500
148	-0.000000
149	-0.000000
150	2557.944500
151	-0.000000
152	-0.000000
153	-0.000000
154	-0.000000
155	2578.122500
156	2472.120500
157	2506.104500
158	-0.000000
159	2577.060500
160	2574.582500
161	-0.000000
162	2574.582500
163	2570.688500
164	2490.528500
165	2559.912500
166	-0.000000
167	2552.280500
168	2461.500500
169	2603.964500
170	2451.234500
171	2512.122500
172	2472.828500
173	2584.140500
174	2462.208500
175	2455.836500
176	2467.164500
177	2415.126500
178	2463.978500
179	2455.482500
180	-0.000000

Coordenada y	Valor y
181	-0.000000
182	2461.500500
183	2428.224500
184	-0.000000
185	-0.000000
186	-0.000000
187	-0.000000
188	-0.000000
189	-0.000000
190	-0.000000
191	-0.000000
192	2647.152500
193	-0.000000
194	2893.182500
195	2839.020500
196	-0.000000
197	-0.000000
198	-0.000000
199	-0.000000
200	-0.000000
201	-0.000000
202	2530.530500
203	-0.000000
204	-0.000000
205	-0.000000
206	2391.027000
207	2534.043000
208	2447.313000
209	2317.395000
210	2386.692500
211	2488.533000
212	2425.521000
213	2441.451000
214	2466.939000
215	2538.093000
216	2455.611000
217	2449.239000
218	-0.000000
219	2468.355000
220	2485.899000
221	2418.993000
222	2374.899000
223	2371.911000
224	2373.681000
225	2357.397000
226	2430.675000
227	2396.691000
228	2376.513000
229	-0.000000

Coordenada y	Valor y
230	2712.261000
231	2412.975000
232	2553.315000
233	2421.825000
234	2387.841000
235	2425.011000
236	2457.381000
237	2372.973000
238	2702.703000
239	2392.089000
240	2360.583000
241	2497.383000
242	2425.011000
243	2426.427000
244	2464.107000
245	2476.497000
246	2493.843000
247	2449.947000
248	2474.373000
249	2489.949000
250	2420.763000
251	2475.633000
252	2457.027000
253	2451.717000
254	2440.500500
255	2503.401000
256	2430.234500
257	2431.383000
258	2451.828500
259	2483.577000
260	2421.471000
261	2434.836500
262	2446.164500
263	2394.126500
264	2403.771000
265	2427.843000
266	-0.000000
267	-0.000000
268	2440.500500
269	2407.224500
270	2669.781000
271	2652.789000
272	2643.231000
273	2702.703000
274	2639.337000
275	-0.000000
276	2596.857000
277	2753.325000
278	2566.413000

Coordenada y	Valor y
279	2635.443000
280	2757.219000
281	2703.057000
282	2572.077000
283	2717.571000
284	2656.329000
285	2449.791000
286	-0.000000
287	2677.569000
288	2338.281000
289	2629.071000
290	-0.000000
291	-0.000000
292	2401.027000
293	2544.043000
294	2441.228500
295	2327.395000
296	2340.692500
297	2498.533000
298	2435.521000
299	2451.451000
300	2476.939000
301	2548.093000
302	2465.611000
303	2459.239000
304	-0.000000
305	2478.355000
306	2481.584500
307	2428.993000
308	2384.899000
309	2381.911000
310	2383.681000
311	2367.397000
312	2440.675000
313	2406.691000
314	2386.513000
315	-0.000000
316	2722.261000
317	2422.975000
318	2563.315000
319	2376.800500
320	2397.841000
321	2435.011000
322	2467.381000
323	2382.973000
324	2712.703000
325	2402.089000
326	2370.583000
327	2507.383000

Coordenada y	Valor y
328	2405.120500
329	2436.427000
330	2474.107000
331	2486.497000
332	2503.843000
333	2459.947000
334	2484.373000
335	2499.949000
336	2423.528500
337	2485.633000
338	2467.027000
339	2461.717000
340	2394.500500
341	2513.401000
342	2384.234500
343	2441.383000
344	2405.828500
345	2493.577000
346	2395.208500
347	2388.836500
348	2400.164500
349	2348.126500
350	2396.978500
351	2388.482500
352	-0.000000
353	-0.000000
354	2394.500500
355	2361.224500
356	2679.781000
357	2662.789000
358	2653.231000
359	2712.703000
360	2649.337000
361	-0.000000
362	2606.857000
363	2763.325000
364	2576.413000
365	2645.443000
366	2767.219000
367	2713.057000
368	2582.077000
369	2727.571000
370	2666.329000
371	2459.791000
372	-0.000000
373	2687.569000
374	2348.281000
375	2639.071000
376	-0.000000

Coordenada y	Valor y
377	-0.000000
378	2413.027000
379	2556.043000
380	2469.313000
381	2339.395000
382	2362.632500
383	2510.533000
384	2447.521000
385	2463.451000
386	2488.939000
387	2560.093000
388	2477.611000
389	2471.239000
390	-0.000000
391	2490.355000
392	2507.899000
393	2440.993000
394	2396.899000
395	-0.000000
396	-0.000000
397	-0.000000
398	2452.675000
399	2418.691000
400	2398.513000
401	-0.000000
402	2734.261000
403	-0.000000
404	2575.315000
405	2425.800500
406	2409.841000
407	2447.011000
408	2479.381000
409	2394.973000
410	2724.703000
411	2414.089000
412	-0.000000
413	2519.383000
414	2447.011000
415	2448.427000
416	2486.107000
417	2498.497000
418	2515.843000
419	2471.947000
420	2496.373000
421	2511.949000
422	2442.763000
423	2497.633000
424	2479.027000
425	2473.717000

Coordenada y	Valor y
426	2443.500500
427	2525.401000
428	2433.234500
429	2453.383000
430	2454.828500
431	2505.577000
432	2443.471000
433	2437.836500
434	2449.164500
435	2397.126500
436	2425.771000
437	2437.482500
438	-0.000000
439	-0.000000
440	2443.500500
441	2410.224500
442	2691.781000
443	2674.789000
444	2665.231000
445	2724.703000
446	2661.337000
447	-0.000000
448	2618.857000
449	2775.325000
450	2588.413000
451	2657.443000
452	2779.219000
453	2725.057000
454	2594.077000
455	2739.571000
456	2678.329000
457	-0.000000
458	-0.000000
459	2699.569000
460	2360.281000
461	2651.071000
462	-0.000000
463	-0.000000
464	2405.590500
465	2584.006500
466	2422.228500
467	2434.618500
468	2294.632500
469	2503.096500
470	2440.084500
471	2456.014500
472	2481.502500
473	2532.832500
474	2470.174500

Coordenada y	Valor y
475	2463.802500
476	-0.000000
477	2482.918500
478	2462.584500
479	2434.618500
480	2481.148500
481	-0.000000
482	-0.000000
483	-0.000000
484	2516.392500
485	-0.000000
486	2520.796500
487	-0.000000
488	2762.224500
489	-0.000000
490	2548.054500
491	2357.800500
492	2532.124500
493	-0.000000
494	2471.944500
495	-0.000000
496	2752.666500
497	2536.372500
498	-0.000000
499	2492.122500
500	2386.120500
501	2420.104500
502	2478.670500
503	2491.060500
504	2488.582500
505	2464.510500
506	2488.582500
507	2484.688500
508	2404.528500
509	2473.912500
510	2471.590500
511	2466.280500
512	2375.500500
513	2517.964500
514	2365.234500
515	2426.122500
516	2386.828500
517	2498.140500
518	2376.208500
519	2369.836500
520	2381.164500
521	2329.126500
522	2377.978500
523	2369.482500

Coordenada y	Valor y
524	-0.000000
525	-0.000000
526	2375.500500
527	2342.224500
528	2719.744500
529	2702.752500
530	2693.194500
531	2752.666500
532	2689.300500
533	-0.000000
534	2591.596500
535	2803.288500
536	2561.152500
537	2685.406500
538	2807.182500
539	2753.020500
540	2586.640500
541	2767.534500
542	2706.292500
543	-0.000000
544	-0.000000
545	2727.532500
546	2444.530500
547	2679.034500
548	-0.000000
549	-0.000000
550	2390.027000
551	2533.043000
552	2446.313000
553	2316.395000
554	2381.692500
555	2487.533000
556	2424.521000
557	2440.451000
558	2465.939000
559	2537.093000
560	2454.611000
561	2448.239000
562	-0.000000
563	2467.355000
564	2484.899000
565	2417.993000
566	2373.899000
567	2370.911000
568	2372.681000
569	2356.397000
570	2429.675000
571	2395.691000
572	2375.513000

Coordenada y	Valor y
573	-0.000000
574	2711.261000
575	2411.975000
576	2552.315000
577	2417.800500
578	2386.841000
579	2424.011000
580	2456.381000
581	2371.973000
582	2701.703000
583	2391.089000
584	2359.583000
585	2496.383000
586	2424.011000
587	2425.427000
588	2463.107000
589	2475.497000
590	2492.843000
591	2448.947000
592	2473.373000
593	2488.949000
594	2419.763000
595	2474.633000
596	2456.027000
597	2450.717000
598	2435.500500
599	2502.401000
600	2425.234500
601	2430.383000
602	2446.828500
603	2482.577000
604	2420.471000
605	2429.836500
606	2441.164500
607	2389.126500
608	2402.771000
609	2426.843000
610	-0.000000
611	-0.000000
612	2435.500500
613	2402.224500
614	2668.781000
615	2651.789000
616	2642.231000
617	2701.703000
618	2638.337000
619	-0.000000
620	2595.857000
621	2752.325000

Continua na próxima página

Coordenada y	Valor y
622	2565.413000
623	2634.443000
624	2756.219000
625	2702.057000
626	2571.077000
627	2716.571000
628	2655.329000
629	2448.791000
630	-0.000000
631	2676.569000
632	2337.281000
633	2628.071000
634	-0.000000
635	-0.000000
636	2483.652500
637	2629.092500
638	2540.892500
639	2408.772500
640	2452.692500
641	2582.352500
642	2518.272500
643	2534.472500
644	2560.392500
645	2632.752500
646	2548.872500
647	2542.392500
648	-0.000000
649	2561.832500
650	2580.132500
651	2512.092500
652	2466.792500
653	2464.212500
654	2466.012500
655	2449.452500
656	2523.972500
657	2489.412500
658	2468.892500
659	-0.000000
660	2809.872500
661	2505.972500
662	2648.232500
663	2489.412500
664	2480.412500
665	2518.212500
666	2550.672500
667	2465.292500
668	2800.152500
669	2484.732500
670	2452.692500

Coordenada y	Valor y
671	2591.352500
672	2518.212500
673	2519.652500
674	2557.512500
675	2570.112500
676	2587.752500
677	2543.112500
678	2567.952500
679	2583.792500
680	2513.892500
681	2569.692500
682	2550.312500
683	2544.912500
684	2507.412500
685	2597.472500
686	2496.972500
687	2524.692500
688	2518.932500
689	2577.312500
690	2508.132500
691	2501.652500
692	2513.172500
693	2460.252500
694	2496.612500
695	2501.292500
696	-0.000000
697	-0.000000
698	2507.412500
699	2473.572500
700	2766.672500
701	2749.392500
702	2739.672500
703	2800.152500
704	2735.712500
705	-0.000000
706	2692.512500
707	2851.632500
708	2661.552500
709	2731.752500
710	2855.592500
711	2800.512500
712	2667.312500
713	2815.272500
714	2752.992500
715	2543.412500
716	-0.000000
717	2774.592500
718	2430.012500
719	2725.272500

Coordenada y	Valor y
720	-0.000000
721	-0.000000
722	2147.132000
723	2290.148000
724	2203.418000
725	2073.500000
726	2076.775334
727	-0.000000
728	-0.000000
729	-0.000000
730	-0.000000
731	-0.000000
732	-0.000000
733	-0.000000
734	-0.000000
735	2224.460000
736	-0.000000
737	-0.000000
738	2131.004000
739	-0.000000
740	-0.000000
741	-0.000000
742	-0.000000
743	-0.000000
744	-0.000000
745	-0.000000
746	-0.000000
747	-0.000000
748	-0.000000
749	2139.943334
750	-0.000000
751	2181.116000
752	-0.000000
753	-0.000000
754	-0.000000
755	-0.000000
756	-0.000000
757	-0.000000
758	-0.000000
759	-0.000000
760	-0.000000
761	2232.602000
762	-0.000000
763	-0.000000
764	2230.478000
765	-0.000000
766	2176.868000
767	-0.000000
768	-0.000000

Coordenada y	Valor y
769	-0.000000
770	2157.643334
771	-0.000000
772	2147.377334
773	2187.488000
774	2168.971334
775	-0.000000
776	2158.351334
777	2151.979334
778	2163.307334
779	2111.269334
780	2159.876000
781	2151.625334
782	-0.000000
783	-0.000000
784	2157.643334
785	2124.367334
786	-0.000000
787	-0.000000
788	-0.000000
789	-0.000000
790	-0.000000
791	-0.000000
792	-0.000000
793	-0.000000
794	-0.000000
795	-0.000000
796	-0.000000
797	-0.000000
798	-0.000000
799	-0.000000
800	-0.000000
801	-0.000000
802	-0.000000
803	-0.000000
804	2094.386000
805	-0.000000
806	-0.000000
807	-0.000000
808	2306.521787
809	2161.255787
810	2370.595787
811	2240.802500
812	2230.503787
813	-0.000000
814	-0.000000
815	-0.000000
816	-0.000000
817	-0.000000

Coordenada y	Valor y
818	-0.000000
819	-0.000000
820	-0.000000
821	2390.097787
822	-0.000000
823	-0.000000
824	2302.090500
825	-0.000000
826	-0.000000
827	-0.000000
828	-0.000000
829	-0.000000
830	-0.000000
831	-0.000000
832	-0.000000
833	-0.000000
834	-0.000000
835	2298.159787
836	-0.000000
837	2361.794500
838	-0.000000
839	-0.000000
840	-0.000000
841	-0.000000
842	-0.000000
843	-0.000000
844	-0.000000
845	-0.000000
846	-0.000000
847	2386.913787
848	-0.000000
849	-0.000000
850	2374.575787
851	-0.000000
852	-0.000000
853	-0.000000
854	-0.000000
855	-0.000000
856	2318.059787
857	-0.000000
858	2306.517787
859	2307.715787
860	2330.795787
861	-0.000000
862	2318.855787
863	2311.691787
864	2324.427787
865	2265.921787
866	-0.000000

Coordenada y	Valor y
867	2311.293787
868	-0.000000
869	-0.000000
870	2318.059787
871	2280.647787
872	-0.000000
873	-0.000000
874	-0.000000
875	-0.000000
876	-0.000000
877	-0.000000
878	-0.000000
879	-0.000000
880	-0.000000
881	-0.000000
882	-0.000000
883	-0.000000
884	-0.000000
885	-0.000000
886	-0.000000
887	-0.000000
888	-0.000000
889	-0.000000
890	2264.284500
891	-0.000000
892	-0.000000
893	-0.000000
894	6737.186134
895	7295.618134
896	6789.262134
897	6828.042134
898	6384.370134
899	7047.898134
900	6850.674134
901	6900.534134
902	6980.310134
903	7140.970134
904	-0.000000
905	6924.910134
906	-0.000000
907	6984.742134
908	6915.574134
909	6828.042134
910	6979.202134
911	-0.000000
912	7094.434134
913	7043.466134
914	7083.990134
915	7166.454134

Coordenada y	Valor y
916	7103.298134
917	-0.000000
918	7858.954134
919	-0.000000
920	7188.614134
921	6587.606134
922	7138.754134
923	7255.094134
924	6950.394134
925	7092.218134
926	7829.038134
927	7152.050134
928	7053.438134
929	7013.550134
930	6676.246134
931	6782.614134
932	6971.446134
933	7010.226134
934	7002.470134
935	-0.000000
936	7002.470134
937	6990.282134
938	6733.862134
939	6951.030134
940	6949.286134
941	6932.666134
942	6643.006134
943	7094.434134
944	6610.874134
945	6801.450134
946	6678.462134
947	7032.386134
948	6645.222134
949	6625.278134
950	6660.734134
951	6497.858134
952	6650.762134
953	6624.170134
954	-0.000000
955	-0.000000
956	6643.006134
957	6538.854134
958	7725.994134
959	7672.810134
960	-0.000000
961	7829.038134
962	7630.706134
963	-0.000000
964	7324.898134

Coordenada y	Valor y
965	7987.482134
966	7229.610134
967	7618.518134
968	-0.000000
969	7830.146134
970	7309.386134
971	7875.574134
972	7683.890134
973	-0.000000
974	-0.000000
975	7750.370134
976	6859.066134
977	7598.574134
978	-0.000000
979	-0.000000
980	3512.656000
981	3727.584000
982	3597.244000
983	3363.340000
984	3553.620000
985	3657.184000
986	3562.488000
987	3586.428000
988	3624.732000
989	3731.664000
990	3607.708000
991	3598.132000
992	-0.000000
993	3626.860000
994	3655.232000
995	3554.684000
996	3486.412000
997	3483.928000
998	3486.588000
999	3462.116000
1000	3572.240000
1001	3521.168000
1002	3490.844000
1003	-0.000000
1004	3993.408000
1005	-0.000000
1006	3754.540000
1007	3558.940000
1008	3507.868000
1009	3563.728000
1010	3610.368000
1011	3485.524000
1012	3979.044000
1013	3514.252000

Coordenada y	Valor y
1014	3466.904000
1015	3670.484000
1016	3563.728000
1017	3565.856000
1018	3620.476000
1019	3639.096000
1020	3665.164000
1021	3599.196000
1022	3635.904000
1023	3659.312000
1024	3557.344000
1025	3639.804000
1026	3609.836000
1027	3601.856000
1028	3673.144000
1029	3679.528000
1030	3657.716000
1031	3573.304000
1032	3621.184000
1033	3649.736000
1034	3558.408000
1035	3596.180000
1036	3681.656000
1037	3584.476000
1038	3531.808000
1039	3567.984000
1040	-0.000000
1041	-0.000000
1042	3673.144000
1043	3580.752000
1044	3929.568000
1045	3904.032000
1046	3889.668000
1047	3979.044000
1048	3883.816000
1049	-0.000000
1050	3819.976000
1051	4055.120000
1052	3774.224000
1053	3877.964000
1054	-0.000000
1055	3979.576000
1056	3782.736000
1057	4001.388000
1058	-0.000000
1059	-0.000000
1060	-0.000000
1061	3941.272000
1062	3433.388000

Continua na próxima página

Coordenada y	Valor y
1063	3868.388000
1064	-0.000000
1065	-0.000000
1066	3510.656000
1067	3725.584000
1068	3595.244000
1069	3400.000000
1070	3551.620000
1071	3655.184000
1072	3560.488000
1073	3584.428000
1074	3622.732000
1075	-0.000000
1076	3605.708000
1077	3596.132000
1078	-0.000000
1079	3624.860000
1080	3653.232000
1081	3552.684000
1082	3484.412000
1083	-0.000000
1084	3484.588000
1085	-0.000000
1086	3570.240000
1087	3519.168000
1088	3488.844000
1089	-0.000000
1090	-0.000000
1091	3543.640000
1092	3752.540000
1093	3556.940000
1094	3505.868000
1095	3561.728000
1096	3608.368000
1097	3483.524000
1098	-0.000000
1099	3512.252000
1100	3464.904000
1101	3668.484000
1102	3561.728000
1103	3563.856000
1104	3618.476000
1105	3637.096000
1106	3663.164000
1107	3597.196000
1108	3633.904000
1109	3657.312000
1110	-0.000000
1111	-0.000000

Coordenada y	Valor y
1112	3607.836000
1113	3599.856000
1114	3671.144000
1115	3677.528000
1116	3655.716000
1117	3571.304000
1118	3619.184000
1119	3647.736000
1120	3556.408000
1121	-0.000000
1122	3679.656000
1123	3582.476000
1124	3529.808000
1125	3565.984000
1126	-0.000000
1127	-0.000000
1128	3671.144000
1129	3578.752000
1130	-0.000000
1131	3902.032000
1132	-0.000000
1133	-0.000000
1134	3881.816000
1135	-0.000000
1136	3817.976000
1137	-0.000000
1138	3772.224000
1139	3875.964000
1140	-0.000000
1141	3977.576000
1142	3780.736000
1143	3999.388000
1144	-0.000000
1145	-0.000000
1146	-0.000000
1147	3939.272000
1148	3431.388000
1149	-0.000000
1150	-0.000000
1151	-0.000000

4 Observações

- O solver HiGHS foi configurado com o método IPM (Interior Point Method).

- Este arquivo contém a solução detalhada para o problema ship12s.

- As variáveis duais representam os multiplicadores de Lagrange das restrições.

- Os custos reduzidos (z) indicam o impacto de forçar variáveis não-básicas na base.