

Resultados Detalhados - Método Gradiente Espelhado - Otimização de Grande Porte

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17 de setembro de 2025

1 Resumo dos Resultados

A tabela abaixo apresenta um resumo dos resultados obtidos com o método Gradiente Espelhado.

Tabela 1: Resumo dos resultados

Problema	Nº Variáveis	Iterações	Valor Mínimo	Tempo (s)
SQUARE ROOT 1	64	1	1.241303e+02	0.005
SQUARE ROOT 2	64	1	1.240176e+02	0.002
FREUDENTHAL ROTH	1000	1	9.845647e+05	3.278
SPARSE MATRIX SQRT	55	1000	4.155250e+01	13.162
ROSENBROCK	1000	1	9.604160e-01	0.000
PENALTY	1000	1	9.604000e+02	0.698
TRIGONOMETRIC	1000	1	9.586354e-07	0.000
EXTENDED ROSENBROCK	1000	1	4.802080e+02	0.615
EXTENDED POWELL	1000	1	0.000000e+00	0.823
QOR	50	1	2.254179e+03	0.000
GOR	50	1	4.680460e+03	0.002
PSP	50	1000	1.173821e+03	7.347
TRIDIAGONAL	1000	1	9.608000e-01	0.663
ENGGVAL1	1000	1	2.871840e+03	1.213
LINEAR MINIMUM SURFACE	64	1	1.267555e+00	0.016
ULTS0	64	6	1.757738e+04	0.056

2 Valores das Variáveis

As tabelas abaixo apresentam os valores de cada variável para cada problema resolvido com sucesso.

2.1 Problema: SQUARE ROOT 1

Informações:

- Número de variáveis: 64
- Iterações: 1
- Valor mínimo: 1.241303e+02
- Tempo de execução: 0.005s

Tabela 2: Valores das variáveis do problema SQUARE ROOT
1

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.161204	2	-0.136631	3	0.109932
4	-0.035968	5	-0.026358	6	-0.175867
7	-0.156465	8	0.150165	9	-0.097744
10	-0.096812	11	0.169446	12	-0.075953
13	-0.103767	14	0.154893	15	-0.160791
16	-0.184650	17	-0.005636	18	-0.091057
19	0.040478	20	-0.177742	21	0.187732
22	0.041354	23	0.159471	24	-0.158395
25	0.030711	26	-0.066575	27	0.024341
28	-0.180959	29	-0.141871	30	0.210452
31	-0.078376	32	-0.045677	33	0.150636
34	-0.022184	35	-0.056118	36	0.162281
37	-0.063105	38	-0.151206	39	0.067319
40	-0.136877	41	-0.051626	42	-0.164105
43	0.199118	44	0.137173	45	0.127277
46	-0.175740	47	-0.097405	48	-0.153873
49	0.112315	50	-0.076443	51	-0.051107
52	0.170334	53	0.039834	54	0.082269
55	0.059694	56	0.107009	57	0.109198
58	0.100139	59	0.050268	60	-0.062244
61	0.176766	62	-0.144416	63	-0.146407
64	-0.092061				

2.2 Problema: SQUARE ROOT 2

Informações:

- Número de variáveis: 64
- Iterações: 1
- Valor mínimo: 1.240176e+02
- Tempo de execução: 0.002s

Tabela 3: Valores das variáveis do problema SQUARE ROOT
2

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.161181	2	-0.136408	3	0.110006
4	-0.035879	5	-0.026453	6	-0.175895
7	-0.156491	8	0.150168	9	-0.097807
10	-0.096963	11	0.169596	12	-0.075977
13	-0.103737	14	0.154749	15	-0.160759
16	-0.184671	17	-0.005603	18	-0.090977
19	0.040407	20	-0.177733	21	0.187718
22	0.041435	23	0.159454	24	-0.158388
25	0.030688	26	-0.066633	27	0.024152
28	-0.180971	29	-0.141861	30	0.210400
31	-0.078364	32	-0.045684	33	0.150628
34	-0.022211	35	-0.056067	36	0.162280
37	-0.063100	38	-0.151234	39	0.067326
40	-0.136883	41	-0.051708	42	-0.164303
43	0.198861	44	0.137146	45	0.127322
46	-0.175936	47	-0.097360	48	-0.153898
49	0.112240	50	-0.076632	51	-0.051202
52	0.170309	53	0.039876	54	0.082085
55	0.059740	56	0.106989	57	0.109275
58	0.100322	59	0.050427	60	-0.062218
61	0.176730	62	-0.144240	63	-0.146453
64	-0.092042				

2.3 Problema: FREUDENTHAL ROTH

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 9.845647e+05
- Tempo de execução: 3.278s

Tabela 4: Valores das variáveis do problema FREUDENTHAL ROTH

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.003373	2	-0.031318	3	-0.031318
4	-0.031318	5	-0.031318	6	-0.031318
7	-0.031318	8	-0.031318	9	-0.031318
10	-0.031318	11	-0.031318	12	-0.031318
13	-0.031318	14	-0.031318	15	-0.031318
16	-0.031318	17	-0.031318	18	-0.031318
19	-0.031318	20	-0.031318	21	-0.031318
22	-0.031318	23	-0.031318	24	-0.031318
25	-0.031318	26	-0.031318	27	-0.031318
28	-0.031318	29	-0.031318	30	-0.031318
31	-0.031318	32	-0.031318	33	-0.031318
34	-0.031318	35	-0.031318	36	-0.031318
37	-0.031318	38	-0.031318	39	-0.031318
40	-0.031318	41	-0.031318	42	-0.031318
43	-0.031318	44	-0.031318	45	-0.031318
46	-0.031318	47	-0.031318	48	-0.031318
49	-0.031318	50	-0.031318	51	-0.031318
52	-0.031318	53	-0.031318	54	-0.031318
55	-0.031318	56	-0.031318	57	-0.031318
58	-0.031318	59	-0.031318	60	-0.031318
61	-0.031318	62	-0.031318	63	-0.031318
64	-0.031318	65	-0.031318	66	-0.031318
67	-0.031318	68	-0.031318	69	-0.031318
70	-0.031318	71	-0.031318	72	-0.031318
73	-0.031318	74	-0.031318	75	-0.031318
76	-0.031318	77	-0.031318	78	-0.031318
79	-0.031318	80	-0.031318	81	-0.031318
82	-0.031318	83	-0.031318	84	-0.031318
85	-0.031318	86	-0.031318	87	-0.031318
88	-0.031318	89	-0.031318	90	-0.031318
91	-0.031318	92	-0.031318	93	-0.031318
94	-0.031318	95	-0.031318	96	-0.031318
97	-0.031318	98	-0.031318	99	-0.031318
100	-0.031318	101	-0.031318	102	-0.031318
103	-0.031318	104	-0.031318	105	-0.031318
106	-0.031318	107	-0.031318	108	-0.031318
109	-0.031318	110	-0.031318	111	-0.031318
112	-0.031318	113	-0.031318	114	-0.031318
115	-0.031318	116	-0.031318	117	-0.031318

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	-0.031318	119	-0.031318	120	-0.031318
121	-0.031318	122	-0.031318	123	-0.031318
124	-0.031318	125	-0.031318	126	-0.031318
127	-0.031318	128	-0.031318	129	-0.031318
130	-0.031318	131	-0.031318	132	-0.031318
133	-0.031318	134	-0.031318	135	-0.031318
136	-0.031318	137	-0.031318	138	-0.031318
139	-0.031318	140	-0.031318	141	-0.031318
142	-0.031318	143	-0.031318	144	-0.031318
145	-0.031318	146	-0.031318	147	-0.031318
148	-0.031318	149	-0.031318	150	-0.031318
151	-0.031318	152	-0.031318	153	-0.031318
154	-0.031318	155	-0.031318	156	-0.031318
157	-0.031318	158	-0.031318	159	-0.031318
160	-0.031318	161	-0.031318	162	-0.031318
163	-0.031318	164	-0.031318	165	-0.031318
166	-0.031318	167	-0.031318	168	-0.031318
169	-0.031318	170	-0.031318	171	-0.031318
172	-0.031318	173	-0.031318	174	-0.031318
175	-0.031318	176	-0.031318	177	-0.031318
178	-0.031318	179	-0.031318	180	-0.031318
181	-0.031318	182	-0.031318	183	-0.031318
184	-0.031318	185	-0.031318	186	-0.031318
187	-0.031318	188	-0.031318	189	-0.031318
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193	-0.031318	194	-0.031318	195	-0.031318
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199	-0.031318	200	-0.031318	201	-0.031318
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205	-0.031318	206	-0.031318	207	-0.031318
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211	-0.031318	212	-0.031318	213	-0.031318
214	-0.031318	215	-0.031318	216	-0.031318
217	-0.031318	218	-0.031318	219	-0.031318
220	-0.031318	221	-0.031318	222	-0.031318
223	-0.031318	224	-0.031318	225	-0.031318
226	-0.031318	227	-0.031318	228	-0.031318
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232	-0.031318	233	-0.031318	234	-0.031318
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238	-0.031318	239	-0.031318	240	-0.031318
241	-0.031318	242	-0.031318	243	-0.031318
244	-0.031318	245	-0.031318	246	-0.031318
247	-0.031318	248	-0.031318	249	-0.031318
250	-0.031318	251	-0.031318	252	-0.031318
253	-0.031318	254	-0.031318	255	-0.031318
256	-0.031318	257	-0.031318	258	-0.031318
259	-0.031318	260	-0.031318	261	-0.031318
262	-0.031318	263	-0.031318	264	-0.031318
265	-0.031318	266	-0.031318	267	-0.031318
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271	-0.031318	272	-0.031318	273	-0.031318

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
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478	-0.031318	479	-0.031318	480	-0.031318
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484	-0.031318	485	-0.031318	486	-0.031318
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490	-0.031318	491	-0.031318	492	-0.031318
493	-0.031318	494	-0.031318	495	-0.031318
496	-0.031318	497	-0.031318	498	-0.031318
499	-0.031318	500	-0.031318	501	-0.031318
502	-0.031318	503	-0.031318	504	-0.031318
505	-0.031318	506	-0.031318	507	-0.031318
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517	-0.031318	518	-0.031318	519	-0.031318
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523	-0.031318	524	-0.031318	525	-0.031318
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529	-0.031318	530	-0.031318	531	-0.031318
532	-0.031318	533	-0.031318	534	-0.031318
535	-0.031318	536	-0.031318	537	-0.031318
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541	-0.031318	542	-0.031318	543	-0.031318
544	-0.031318	545	-0.031318	546	-0.031318
547	-0.031318	548	-0.031318	549	-0.031318
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553	-0.031318	554	-0.031318	555	-0.031318
556	-0.031318	557	-0.031318	558	-0.031318
559	-0.031318	560	-0.031318	561	-0.031318
562	-0.031318	563	-0.031318	564	-0.031318
565	-0.031318	566	-0.031318	567	-0.031318
568	-0.031318	569	-0.031318	570	-0.031318
571	-0.031318	572	-0.031318	573	-0.031318
574	-0.031318	575	-0.031318	576	-0.031318
577	-0.031318	578	-0.031318	579	-0.031318
580	-0.031318	581	-0.031318	582	-0.031318
583	-0.031318	584	-0.031318	585	-0.031318

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	-0.031318	587	-0.031318	588	-0.031318
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592	-0.031318	593	-0.031318	594	-0.031318
595	-0.031318	596	-0.031318	597	-0.031318
598	-0.031318	599	-0.031318	600	-0.031318
601	-0.031318	602	-0.031318	603	-0.031318
604	-0.031318	605	-0.031318	606	-0.031318
607	-0.031318	608	-0.031318	609	-0.031318
610	-0.031318	611	-0.031318	612	-0.031318
613	-0.031318	614	-0.031318	615	-0.031318
616	-0.031318	617	-0.031318	618	-0.031318
619	-0.031318	620	-0.031318	621	-0.031318
622	-0.031318	623	-0.031318	624	-0.031318
625	-0.031318	626	-0.031318	627	-0.031318
628	-0.031318	629	-0.031318	630	-0.031318
631	-0.031318	632	-0.031318	633	-0.031318
634	-0.031318	635	-0.031318	636	-0.031318
637	-0.031318	638	-0.031318	639	-0.031318
640	-0.031318	641	-0.031318	642	-0.031318
643	-0.031318	644	-0.031318	645	-0.031318
646	-0.031318	647	-0.031318	648	-0.031318
649	-0.031318	650	-0.031318	651	-0.031318
652	-0.031318	653	-0.031318	654	-0.031318
655	-0.031318	656	-0.031318	657	-0.031318
658	-0.031318	659	-0.031318	660	-0.031318
661	-0.031318	662	-0.031318	663	-0.031318
664	-0.031318	665	-0.031318	666	-0.031318
667	-0.031318	668	-0.031318	669	-0.031318
670	-0.031318	671	-0.031318	672	-0.031318
673	-0.031318	674	-0.031318	675	-0.031318
676	-0.031318	677	-0.031318	678	-0.031318
679	-0.031318	680	-0.031318	681	-0.031318
682	-0.031318	683	-0.031318	684	-0.031318
685	-0.031318	686	-0.031318	687	-0.031318
688	-0.031318	689	-0.031318	690	-0.031318
691	-0.031318	692	-0.031318	693	-0.031318
694	-0.031318	695	-0.031318	696	-0.031318
697	-0.031318	698	-0.031318	699	-0.031318
700	-0.031318	701	-0.031318	702	-0.031318
703	-0.031318	704	-0.031318	705	-0.031318
706	-0.031318	707	-0.031318	708	-0.031318
709	-0.031318	710	-0.031318	711	-0.031318
712	-0.031318	713	-0.031318	714	-0.031318
715	-0.031318	716	-0.031318	717	-0.031318
718	-0.031318	719	-0.031318	720	-0.031318
721	-0.031318	722	-0.031318	723	-0.031318
724	-0.031318	725	-0.031318	726	-0.031318
727	-0.031318	728	-0.031318	729	-0.031318
730	-0.031318	731	-0.031318	732	-0.031318
733	-0.031318	734	-0.031318	735	-0.031318
736	-0.031318	737	-0.031318	738	-0.031318
739	-0.031318	740	-0.031318	741	-0.031318

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	-0.031318	743	-0.031318	744	-0.031318
745	-0.031318	746	-0.031318	747	-0.031318
748	-0.031318	749	-0.031318	750	-0.031318
751	-0.031318	752	-0.031318	753	-0.031318
754	-0.031318	755	-0.031318	756	-0.031318
757	-0.031318	758	-0.031318	759	-0.031318
760	-0.031318	761	-0.031318	762	-0.031318
763	-0.031318	764	-0.031318	765	-0.031318
766	-0.031318	767	-0.031318	768	-0.031318
769	-0.031318	770	-0.031318	771	-0.031318
772	-0.031318	773	-0.031318	774	-0.031318
775	-0.031318	776	-0.031318	777	-0.031318
778	-0.031318	779	-0.031318	780	-0.031318
781	-0.031318	782	-0.031318	783	-0.031318
784	-0.031318	785	-0.031318	786	-0.031318
787	-0.031318	788	-0.031318	789	-0.031318
790	-0.031318	791	-0.031318	792	-0.031318
793	-0.031318	794	-0.031318	795	-0.031318
796	-0.031318	797	-0.031318	798	-0.031318
799	-0.031318	800	-0.031318	801	-0.031318
802	-0.031318	803	-0.031318	804	-0.031318
805	-0.031318	806	-0.031318	807	-0.031318
808	-0.031318	809	-0.031318	810	-0.031318
811	-0.031318	812	-0.031318	813	-0.031318
814	-0.031318	815	-0.031318	816	-0.031318
817	-0.031318	818	-0.031318	819	-0.031318
820	-0.031318	821	-0.031318	822	-0.031318
823	-0.031318	824	-0.031318	825	-0.031318
826	-0.031318	827	-0.031318	828	-0.031318
829	-0.031318	830	-0.031318	831	-0.031318
832	-0.031318	833	-0.031318	834	-0.031318
835	-0.031318	836	-0.031318	837	-0.031318
838	-0.031318	839	-0.031318	840	-0.031318
841	-0.031318	842	-0.031318	843	-0.031318
844	-0.031318	845	-0.031318	846	-0.031318
847	-0.031318	848	-0.031318	849	-0.031318
850	-0.031318	851	-0.031318	852	-0.031318
853	-0.031318	854	-0.031318	855	-0.031318
856	-0.031318	857	-0.031318	858	-0.031318
859	-0.031318	860	-0.031318	861	-0.031318
862	-0.031318	863	-0.031318	864	-0.031318
865	-0.031318	866	-0.031318	867	-0.031318
868	-0.031318	869	-0.031318	870	-0.031318
871	-0.031318	872	-0.031318	873	-0.031318
874	-0.031318	875	-0.031318	876	-0.031318
877	-0.031318	878	-0.031318	879	-0.031318
880	-0.031318	881	-0.031318	882	-0.031318
883	-0.031318	884	-0.031318	885	-0.031318
886	-0.031318	887	-0.031318	888	-0.031318
889	-0.031318	890	-0.031318	891	-0.031318
892	-0.031318	893	-0.031318	894	-0.031318
895	-0.031318	896	-0.031318	897	-0.031318

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	-0.031318	899	-0.031318	900	-0.031318
901	-0.031318	902	-0.031318	903	-0.031318
904	-0.031318	905	-0.031318	906	-0.031318
907	-0.031318	908	-0.031318	909	-0.031318
910	-0.031318	911	-0.031318	912	-0.031318
913	-0.031318	914	-0.031318	915	-0.031318
916	-0.031318	917	-0.031318	918	-0.031318
919	-0.031318	920	-0.031318	921	-0.031318
922	-0.031318	923	-0.031318	924	-0.031318
925	-0.031318	926	-0.031318	927	-0.031318
928	-0.031318	929	-0.031318	930	-0.031318
931	-0.031318	932	-0.031318	933	-0.031318
934	-0.031318	935	-0.031318	936	-0.031318
937	-0.031318	938	-0.031318	939	-0.031318
940	-0.031318	941	-0.031318	942	-0.031318
943	-0.031318	944	-0.031318	945	-0.031318
946	-0.031318	947	-0.031318	948	-0.031318
949	-0.031318	950	-0.031318	951	-0.031318
952	-0.031318	953	-0.031318	954	-0.031318
955	-0.031318	956	-0.031318	957	-0.031318
958	-0.031318	959	-0.031318	960	-0.031318
961	-0.031318	962	-0.031318	963	-0.031318
964	-0.031318	965	-0.031318	966	-0.031318
967	-0.031318	968	-0.031318	969	-0.031318
970	-0.031318	971	-0.031318	972	-0.031318
973	-0.031318	974	-0.031318	975	-0.031318
976	-0.031318	977	-0.031318	978	-0.031318
979	-0.031318	980	-0.031318	981	-0.031318
982	-0.031318	983	-0.031318	984	-0.031318
985	-0.031318	986	-0.031318	987	-0.031318
988	-0.031318	989	-0.031318	990	-0.031318
991	-0.031318	992	-0.031318	993	-0.031318
994	-0.031318	995	-0.031318	996	-0.031318
997	-0.031318	998	-0.031318	999	-0.031318
1000	-0.034691				

2.4 Problema: SPARSE MATRIX SQRT

Informações:

- Número de variáveis: 55
- Iterações: 1000
- Valor mínimo: 4.155250e+01
- Tempo de execução: 13.162s

Tabela 5: Valores das variáveis do problema SPARSE MATRIX SQRT

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.168294	2	-0.151360	3	0.082424
4	-0.057581	5	-0.026470	6	-0.198356
7	-0.190751	8	0.184005	9	-0.125978
10	-0.101273	11	0.199763	12	-0.098204
13	-0.120400	14	0.187906	15	-0.186019
16	-0.199842	17	-0.005304	18	-0.080813
19	0.055877	20	-0.170184	21	0.184694
22	0.038701	23	0.187295	24	-0.177191
25	0.035203	26	-0.105827	27	0.029987
28	-0.197027	29	-0.162314	30	0.199561
31	-0.064307	32	-0.031707	33	0.181108
34	-0.021180	35	-0.043867	36	0.199135
37	-0.134028	38	-0.181105	39	0.090427
40	-0.160245	41	-0.049080	42	-0.199998
43	0.197024	44	0.140503	45	0.194098
46	-0.198117	47	-0.088855	48	-0.187305
49	0.146667	50	-0.130026	51	-0.047291
52	0.158057	53	0.080852	54	0.113261
55	0.069279				

2.5 Problema: ROSENBROCK

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 9.604160e-01
- Tempo de execução: 0.000s

Tabela 6: Valores das variáveis do problema ROSENBROCK

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.020000	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	0.000000	14	0.000000	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	0.000000
25	0.000000	26	0.000000	27	0.000000
28	0.000000	29	0.000000	30	0.000000
31	0.000000	32	0.000000	33	0.000000
34	0.000000	35	0.000000	36	0.000000
37	0.000000	38	0.000000	39	0.000000
40	0.000000	41	0.000000	42	0.000000
43	0.000000	44	0.000000	45	0.000000
46	0.000000	47	0.000000	48	0.000000
49	0.000000	50	0.000000	51	0.000000
52	0.000000	53	0.000000	54	0.000000
55	0.000000	56	0.000000	57	0.000000
58	0.000000	59	0.000000	60	0.000000
61	0.000000	62	0.000000	63	0.000000
64	0.000000	65	0.000000	66	0.000000
67	0.000000	68	0.000000	69	0.000000
70	0.000000	71	0.000000	72	0.000000
73	0.000000	74	0.000000	75	0.000000
76	0.000000	77	0.000000	78	0.000000
79	0.000000	80	0.000000	81	0.000000
82	0.000000	83	0.000000	84	0.000000
85	0.000000	86	0.000000	87	0.000000
88	0.000000	89	0.000000	90	0.000000
91	0.000000	92	0.000000	93	0.000000
94	0.000000	95	0.000000	96	0.000000
97	0.000000	98	0.000000	99	0.000000
100	0.000000	101	0.000000	102	0.000000
103	0.000000	104	0.000000	105	0.000000
106	0.000000	107	0.000000	108	0.000000
109	0.000000	110	0.000000	111	0.000000
112	0.000000	113	0.000000	114	0.000000
115	0.000000	116	0.000000	117	0.000000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.000000	119	0.000000	120	0.000000
121	0.000000	122	0.000000	123	0.000000
124	0.000000	125	0.000000	126	0.000000
127	0.000000	128	0.000000	129	0.000000
130	0.000000	131	0.000000	132	0.000000
133	0.000000	134	0.000000	135	0.000000
136	0.000000	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	0.000000
148	0.000000	149	0.000000	150	0.000000
151	0.000000	152	0.000000	153	0.000000
154	0.000000	155	0.000000	156	0.000000
157	0.000000	158	0.000000	159	0.000000
160	0.000000	161	0.000000	162	0.000000
163	0.000000	164	0.000000	165	0.000000
166	0.000000	167	0.000000	168	0.000000
169	0.000000	170	0.000000	171	0.000000
172	0.000000	173	0.000000	174	0.000000
175	0.000000	176	0.000000	177	0.000000
178	0.000000	179	0.000000	180	0.000000
181	0.000000	182	0.000000	183	0.000000
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	0.000000
193	0.000000	194	0.000000	195	0.000000
196	0.000000	197	0.000000	198	0.000000
199	0.000000	200	0.000000	201	0.000000
202	0.000000	203	0.000000	204	0.000000
205	0.000000	206	0.000000	207	0.000000
208	0.000000	209	0.000000	210	0.000000
211	0.000000	212	0.000000	213	0.000000
214	0.000000	215	0.000000	216	0.000000
217	0.000000	218	0.000000	219	0.000000
220	0.000000	221	0.000000	222	0.000000
223	0.000000	224	0.000000	225	0.000000
226	0.000000	227	0.000000	228	0.000000
229	0.000000	230	0.000000	231	0.000000
232	0.000000	233	0.000000	234	0.000000
235	0.000000	236	0.000000	237	0.000000
238	0.000000	239	0.000000	240	0.000000
241	0.000000	242	0.000000	243	0.000000
244	0.000000	245	0.000000	246	0.000000
247	0.000000	248	0.000000	249	0.000000
250	0.000000	251	0.000000	252	0.000000
253	0.000000	254	0.000000	255	0.000000
256	0.000000	257	0.000000	258	0.000000
259	0.000000	260	0.000000	261	0.000000
262	0.000000	263	0.000000	264	0.000000
265	0.000000	266	0.000000	267	0.000000
268	0.000000	269	0.000000	270	0.000000
271	0.000000	272	0.000000	273	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.000000	275	0.000000	276	0.000000
277	0.000000	278	0.000000	279	0.000000
280	0.000000	281	0.000000	282	0.000000
283	0.000000	284	0.000000	285	0.000000
286	0.000000	287	0.000000	288	0.000000
289	0.000000	290	0.000000	291	0.000000
292	0.000000	293	0.000000	294	0.000000
295	0.000000	296	0.000000	297	0.000000
298	0.000000	299	0.000000	300	0.000000
301	0.000000	302	0.000000	303	0.000000
304	0.000000	305	0.000000	306	0.000000
307	0.000000	308	0.000000	309	0.000000
310	0.000000	311	0.000000	312	0.000000
313	0.000000	314	0.000000	315	0.000000
316	0.000000	317	0.000000	318	0.000000
319	0.000000	320	0.000000	321	0.000000
322	0.000000	323	0.000000	324	0.000000
325	0.000000	326	0.000000	327	0.000000
328	0.000000	329	0.000000	330	0.000000
331	0.000000	332	0.000000	333	0.000000
334	0.000000	335	0.000000	336	0.000000
337	0.000000	338	0.000000	339	0.000000
340	0.000000	341	0.000000	342	0.000000
343	0.000000	344	0.000000	345	0.000000
346	0.000000	347	0.000000	348	0.000000
349	0.000000	350	0.000000	351	0.000000
352	0.000000	353	0.000000	354	0.000000
355	0.000000	356	0.000000	357	0.000000
358	0.000000	359	0.000000	360	0.000000
361	0.000000	362	0.000000	363	0.000000
364	0.000000	365	0.000000	366	0.000000
367	0.000000	368	0.000000	369	0.000000
370	0.000000	371	0.000000	372	0.000000
373	0.000000	374	0.000000	375	0.000000
376	0.000000	377	0.000000	378	0.000000
379	0.000000	380	0.000000	381	0.000000
382	0.000000	383	0.000000	384	0.000000
385	0.000000	386	0.000000	387	0.000000
388	0.000000	389	0.000000	390	0.000000
391	0.000000	392	0.000000	393	0.000000
394	0.000000	395	0.000000	396	0.000000
397	0.000000	398	0.000000	399	0.000000
400	0.000000	401	0.000000	402	0.000000
403	0.000000	404	0.000000	405	0.000000
406	0.000000	407	0.000000	408	0.000000
409	0.000000	410	0.000000	411	0.000000
412	0.000000	413	0.000000	414	0.000000
415	0.000000	416	0.000000	417	0.000000
418	0.000000	419	0.000000	420	0.000000
421	0.000000	422	0.000000	423	0.000000
424	0.000000	425	0.000000	426	0.000000
427	0.000000	428	0.000000	429	0.000000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.000000	431	0.000000	432	0.000000
433	0.000000	434	0.000000	435	0.000000
436	0.000000	437	0.000000	438	0.000000
439	0.000000	440	0.000000	441	0.000000
442	0.000000	443	0.000000	444	0.000000
445	0.000000	446	0.000000	447	0.000000
448	0.000000	449	0.000000	450	0.000000
451	0.000000	452	0.000000	453	0.000000
454	0.000000	455	0.000000	456	0.000000
457	0.000000	458	0.000000	459	0.000000
460	0.000000	461	0.000000	462	0.000000
463	0.000000	464	0.000000	465	0.000000
466	0.000000	467	0.000000	468	0.000000
469	0.000000	470	0.000000	471	0.000000
472	0.000000	473	0.000000	474	0.000000
475	0.000000	476	0.000000	477	0.000000
478	0.000000	479	0.000000	480	0.000000
481	0.000000	482	0.000000	483	0.000000
484	0.000000	485	0.000000	486	0.000000
487	0.000000	488	0.000000	489	0.000000
490	0.000000	491	0.000000	492	0.000000
493	0.000000	494	0.000000	495	0.000000
496	0.000000	497	0.000000	498	0.000000
499	0.000000	500	0.000000	501	0.000000
502	0.000000	503	0.000000	504	0.000000
505	0.000000	506	0.000000	507	0.000000
508	0.000000	509	0.000000	510	0.000000
511	0.000000	512	0.000000	513	0.000000
514	0.000000	515	0.000000	516	0.000000
517	0.000000	518	0.000000	519	0.000000
520	0.000000	521	0.000000	522	0.000000
523	0.000000	524	0.000000	525	0.000000
526	0.000000	527	0.000000	528	0.000000
529	0.000000	530	0.000000	531	0.000000
532	0.000000	533	0.000000	534	0.000000
535	0.000000	536	0.000000	537	0.000000
538	0.000000	539	0.000000	540	0.000000
541	0.000000	542	0.000000	543	0.000000
544	0.000000	545	0.000000	546	0.000000
547	0.000000	548	0.000000	549	0.000000
550	0.000000	551	0.000000	552	0.000000
553	0.000000	554	0.000000	555	0.000000
556	0.000000	557	0.000000	558	0.000000
559	0.000000	560	0.000000	561	0.000000
562	0.000000	563	0.000000	564	0.000000
565	0.000000	566	0.000000	567	0.000000
568	0.000000	569	0.000000	570	0.000000
571	0.000000	572	0.000000	573	0.000000
574	0.000000	575	0.000000	576	0.000000
577	0.000000	578	0.000000	579	0.000000
580	0.000000	581	0.000000	582	0.000000
583	0.000000	584	0.000000	585	0.000000

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.000000	587	0.000000	588	0.000000
589	0.000000	590	0.000000	591	0.000000
592	0.000000	593	0.000000	594	0.000000
595	0.000000	596	0.000000	597	0.000000
598	0.000000	599	0.000000	600	0.000000
601	0.000000	602	0.000000	603	0.000000
604	0.000000	605	0.000000	606	0.000000
607	0.000000	608	0.000000	609	0.000000
610	0.000000	611	0.000000	612	0.000000
613	0.000000	614	0.000000	615	0.000000
616	0.000000	617	0.000000	618	0.000000
619	0.000000	620	0.000000	621	0.000000
622	0.000000	623	0.000000	624	0.000000
625	0.000000	626	0.000000	627	0.000000
628	0.000000	629	0.000000	630	0.000000
631	0.000000	632	0.000000	633	0.000000
634	0.000000	635	0.000000	636	0.000000
637	0.000000	638	0.000000	639	0.000000
640	0.000000	641	0.000000	642	0.000000
643	0.000000	644	0.000000	645	0.000000
646	0.000000	647	0.000000	648	0.000000
649	0.000000	650	0.000000	651	0.000000
652	0.000000	653	0.000000	654	0.000000
655	0.000000	656	0.000000	657	0.000000
658	0.000000	659	0.000000	660	0.000000
661	0.000000	662	0.000000	663	0.000000
664	0.000000	665	0.000000	666	0.000000
667	0.000000	668	0.000000	669	0.000000
670	0.000000	671	0.000000	672	0.000000
673	0.000000	674	0.000000	675	0.000000
676	0.000000	677	0.000000	678	0.000000
679	0.000000	680	0.000000	681	0.000000
682	0.000000	683	0.000000	684	0.000000
685	0.000000	686	0.000000	687	0.000000
688	0.000000	689	0.000000	690	0.000000
691	0.000000	692	0.000000	693	0.000000
694	0.000000	695	0.000000	696	0.000000
697	0.000000	698	0.000000	699	0.000000
700	0.000000	701	0.000000	702	0.000000
703	0.000000	704	0.000000	705	0.000000
706	0.000000	707	0.000000	708	0.000000
709	0.000000	710	0.000000	711	0.000000
712	0.000000	713	0.000000	714	0.000000
715	0.000000	716	0.000000	717	0.000000
718	0.000000	719	0.000000	720	0.000000
721	0.000000	722	0.000000	723	0.000000
724	0.000000	725	0.000000	726	0.000000
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	0.000000
736	0.000000	737	0.000000	738	0.000000
739	0.000000	740	0.000000	741	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.000000	743	0.000000	744	0.000000
745	0.000000	746	0.000000	747	0.000000
748	0.000000	749	0.000000	750	0.000000
751	0.000000	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	0.000000	762	0.000000
763	0.000000	764	0.000000	765	0.000000
766	0.000000	767	0.000000	768	0.000000
769	0.000000	770	0.000000	771	0.000000
772	0.000000	773	0.000000	774	0.000000
775	0.000000	776	0.000000	777	0.000000
778	0.000000	779	0.000000	780	0.000000
781	0.000000	782	0.000000	783	0.000000
784	0.000000	785	0.000000	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	0.000000
805	0.000000	806	0.000000	807	0.000000
808	0.000000	809	0.000000	810	0.000000
811	0.000000	812	0.000000	813	0.000000
814	0.000000	815	0.000000	816	0.000000
817	0.000000	818	0.000000	819	0.000000
820	0.000000	821	0.000000	822	0.000000
823	0.000000	824	0.000000	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	0.000000	836	0.000000	837	0.000000
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	0.000000	848	0.000000	849	0.000000
850	0.000000	851	0.000000	852	0.000000
853	0.000000	854	0.000000	855	0.000000
856	0.000000	857	0.000000	858	0.000000
859	0.000000	860	0.000000	861	0.000000
862	0.000000	863	0.000000	864	0.000000
865	0.000000	866	0.000000	867	0.000000
868	0.000000	869	0.000000	870	0.000000
871	0.000000	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	0.000000	891	0.000000
892	0.000000	893	0.000000	894	0.000000
895	0.000000	896	0.000000	897	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.000000	899	0.000000	900	0.000000
901	0.000000	902	0.000000	903	0.000000
904	0.000000	905	0.000000	906	0.000000
907	0.000000	908	0.000000	909	0.000000
910	0.000000	911	0.000000	912	0.000000
913	0.000000	914	0.000000	915	0.000000
916	0.000000	917	0.000000	918	0.000000
919	0.000000	920	0.000000	921	0.000000
922	0.000000	923	0.000000	924	0.000000
925	0.000000	926	0.000000	927	0.000000
928	0.000000	929	0.000000	930	0.000000
931	0.000000	932	0.000000	933	0.000000
934	0.000000	935	0.000000	936	0.000000
937	0.000000	938	0.000000	939	0.000000
940	0.000000	941	0.000000	942	0.000000
943	0.000000	944	0.000000	945	0.000000
946	0.000000	947	0.000000	948	0.000000
949	0.000000	950	0.000000	951	0.000000
952	0.000000	953	0.000000	954	0.000000
955	0.000000	956	0.000000	957	0.000000
958	0.000000	959	0.000000	960	0.000000
961	0.000000	962	0.000000	963	0.000000
964	0.000000	965	0.000000	966	0.000000
967	0.000000	968	0.000000	969	0.000000
970	0.000000	971	0.000000	972	0.000000
973	0.000000	974	0.000000	975	0.000000
976	0.000000	977	0.000000	978	0.000000
979	0.000000	980	0.000000	981	0.000000
982	0.000000	983	0.000000	984	0.000000
985	0.000000	986	0.000000	987	0.000000
988	0.000000	989	0.000000	990	0.000000
991	0.000000	992	0.000000	993	0.000000
994	0.000000	995	0.000000	996	0.000000
997	0.000000	998	0.000000	999	0.000000
1000	0.000000				

2.6 Problema: PENALTY

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 9.604000e+02
- Tempo de execução: 0.698s

Tabela 7: Valores das variáveis do problema PENALTY

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.020000	2	0.020000	3	0.020000
4	0.020000	5	0.020000	6	0.020000
7	0.020000	8	0.020000	9	0.020000
10	0.020000	11	0.020000	12	0.020000
13	0.020000	14	0.020000	15	0.020000
16	0.020000	17	0.020000	18	0.020000
19	0.020000	20	0.020000	21	0.020000
22	0.020000	23	0.020000	24	0.020000
25	0.020000	26	0.020000	27	0.020000
28	0.020000	29	0.020000	30	0.020000
31	0.020000	32	0.020000	33	0.020000
34	0.020000	35	0.020000	36	0.020000
37	0.020000	38	0.020000	39	0.020000
40	0.020000	41	0.020000	42	0.020000
43	0.020000	44	0.020000	45	0.020000
46	0.020000	47	0.020000	48	0.020000
49	0.020000	50	0.020000	51	0.020000
52	0.020000	53	0.020000	54	0.020000
55	0.020000	56	0.020000	57	0.020000
58	0.020000	59	0.020000	60	0.020000
61	0.020000	62	0.020000	63	0.020000
64	0.020000	65	0.020000	66	0.020000
67	0.020000	68	0.020000	69	0.020000
70	0.020000	71	0.020000	72	0.020000
73	0.020000	74	0.020000	75	0.020000
76	0.020000	77	0.020000	78	0.020000
79	0.020000	80	0.020000	81	0.020000
82	0.020000	83	0.020000	84	0.020000
85	0.020000	86	0.020000	87	0.020000
88	0.020000	89	0.020000	90	0.020000
91	0.020000	92	0.020000	93	0.020000
94	0.020000	95	0.020000	96	0.020000
97	0.020000	98	0.020000	99	0.020000
100	0.020000	101	0.020000	102	0.020000
103	0.020000	104	0.020000	105	0.020000
106	0.020000	107	0.020000	108	0.020000
109	0.020000	110	0.020000	111	0.020000
112	0.020000	113	0.020000	114	0.020000
115	0.020000	116	0.020000	117	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.020000	119	0.020000	120	0.020000
121	0.020000	122	0.020000	123	0.020000
124	0.020000	125	0.020000	126	0.020000
127	0.020000	128	0.020000	129	0.020000
130	0.020000	131	0.020000	132	0.020000
133	0.020000	134	0.020000	135	0.020000
136	0.020000	137	0.020000	138	0.020000
139	0.020000	140	0.020000	141	0.020000
142	0.020000	143	0.020000	144	0.020000
145	0.020000	146	0.020000	147	0.020000
148	0.020000	149	0.020000	150	0.020000
151	0.020000	152	0.020000	153	0.020000
154	0.020000	155	0.020000	156	0.020000
157	0.020000	158	0.020000	159	0.020000
160	0.020000	161	0.020000	162	0.020000
163	0.020000	164	0.020000	165	0.020000
166	0.020000	167	0.020000	168	0.020000
169	0.020000	170	0.020000	171	0.020000
172	0.020000	173	0.020000	174	0.020000
175	0.020000	176	0.020000	177	0.020000
178	0.020000	179	0.020000	180	0.020000
181	0.020000	182	0.020000	183	0.020000
184	0.020000	185	0.020000	186	0.020000
187	0.020000	188	0.020000	189	0.020000
190	0.020000	191	0.020000	192	0.020000
193	0.020000	194	0.020000	195	0.020000
196	0.020000	197	0.020000	198	0.020000
199	0.020000	200	0.020000	201	0.020000
202	0.020000	203	0.020000	204	0.020000
205	0.020000	206	0.020000	207	0.020000
208	0.020000	209	0.020000	210	0.020000
211	0.020000	212	0.020000	213	0.020000
214	0.020000	215	0.020000	216	0.020000
217	0.020000	218	0.020000	219	0.020000
220	0.020000	221	0.020000	222	0.020000
223	0.020000	224	0.020000	225	0.020000
226	0.020000	227	0.020000	228	0.020000
229	0.020000	230	0.020000	231	0.020000
232	0.020000	233	0.020000	234	0.020000
235	0.020000	236	0.020000	237	0.020000
238	0.020000	239	0.020000	240	0.020000
241	0.020000	242	0.020000	243	0.020000
244	0.020000	245	0.020000	246	0.020000
247	0.020000	248	0.020000	249	0.020000
250	0.020000	251	0.020000	252	0.020000
253	0.020000	254	0.020000	255	0.020000
256	0.020000	257	0.020000	258	0.020000
259	0.020000	260	0.020000	261	0.020000
262	0.020000	263	0.020000	264	0.020000
265	0.020000	266	0.020000	267	0.020000
268	0.020000	269	0.020000	270	0.020000
271	0.020000	272	0.020000	273	0.020000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.020000	275	0.020000	276	0.020000
277	0.020000	278	0.020000	279	0.020000
280	0.020000	281	0.020000	282	0.020000
283	0.020000	284	0.020000	285	0.020000
286	0.020000	287	0.020000	288	0.020000
289	0.020000	290	0.020000	291	0.020000
292	0.020000	293	0.020000	294	0.020000
295	0.020000	296	0.020000	297	0.020000
298	0.020000	299	0.020000	300	0.020000
301	0.020000	302	0.020000	303	0.020000
304	0.020000	305	0.020000	306	0.020000
307	0.020000	308	0.020000	309	0.020000
310	0.020000	311	0.020000	312	0.020000
313	0.020000	314	0.020000	315	0.020000
316	0.020000	317	0.020000	318	0.020000
319	0.020000	320	0.020000	321	0.020000
322	0.020000	323	0.020000	324	0.020000
325	0.020000	326	0.020000	327	0.020000
328	0.020000	329	0.020000	330	0.020000
331	0.020000	332	0.020000	333	0.020000
334	0.020000	335	0.020000	336	0.020000
337	0.020000	338	0.020000	339	0.020000
340	0.020000	341	0.020000	342	0.020000
343	0.020000	344	0.020000	345	0.020000
346	0.020000	347	0.020000	348	0.020000
349	0.020000	350	0.020000	351	0.020000
352	0.020000	353	0.020000	354	0.020000
355	0.020000	356	0.020000	357	0.020000
358	0.020000	359	0.020000	360	0.020000
361	0.020000	362	0.020000	363	0.020000
364	0.020000	365	0.020000	366	0.020000
367	0.020000	368	0.020000	369	0.020000
370	0.020000	371	0.020000	372	0.020000
373	0.020000	374	0.020000	375	0.020000
376	0.020000	377	0.020000	378	0.020000
379	0.020000	380	0.020000	381	0.020000
382	0.020000	383	0.020000	384	0.020000
385	0.020000	386	0.020000	387	0.020000
388	0.020000	389	0.020000	390	0.020000
391	0.020000	392	0.020000	393	0.020000
394	0.020000	395	0.020000	396	0.020000
397	0.020000	398	0.020000	399	0.020000
400	0.020000	401	0.020000	402	0.020000
403	0.020000	404	0.020000	405	0.020000
406	0.020000	407	0.020000	408	0.020000
409	0.020000	410	0.020000	411	0.020000
412	0.020000	413	0.020000	414	0.020000
415	0.020000	416	0.020000	417	0.020000
418	0.020000	419	0.020000	420	0.020000
421	0.020000	422	0.020000	423	0.020000
424	0.020000	425	0.020000	426	0.020000
427	0.020000	428	0.020000	429	0.020000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.020000	431	0.020000	432	0.020000
433	0.020000	434	0.020000	435	0.020000
436	0.020000	437	0.020000	438	0.020000
439	0.020000	440	0.020000	441	0.020000
442	0.020000	443	0.020000	444	0.020000
445	0.020000	446	0.020000	447	0.020000
448	0.020000	449	0.020000	450	0.020000
451	0.020000	452	0.020000	453	0.020000
454	0.020000	455	0.020000	456	0.020000
457	0.020000	458	0.020000	459	0.020000
460	0.020000	461	0.020000	462	0.020000
463	0.020000	464	0.020000	465	0.020000
466	0.020000	467	0.020000	468	0.020000
469	0.020000	470	0.020000	471	0.020000
472	0.020000	473	0.020000	474	0.020000
475	0.020000	476	0.020000	477	0.020000
478	0.020000	479	0.020000	480	0.020000
481	0.020000	482	0.020000	483	0.020000
484	0.020000	485	0.020000	486	0.020000
487	0.020000	488	0.020000	489	0.020000
490	0.020000	491	0.020000	492	0.020000
493	0.020000	494	0.020000	495	0.020000
496	0.020000	497	0.020000	498	0.020000
499	0.020000	500	0.020000	501	0.020000
502	0.020000	503	0.020000	504	0.020000
505	0.020000	506	0.020000	507	0.020000
508	0.020000	509	0.020000	510	0.020000
511	0.020000	512	0.020000	513	0.020000
514	0.020000	515	0.020000	516	0.020000
517	0.020000	518	0.020000	519	0.020000
520	0.020000	521	0.020000	522	0.020000
523	0.020000	524	0.020000	525	0.020000
526	0.020000	527	0.020000	528	0.020000
529	0.020000	530	0.020000	531	0.020000
532	0.020000	533	0.020000	534	0.020000
535	0.020000	536	0.020000	537	0.020000
538	0.020000	539	0.020000	540	0.020000
541	0.020000	542	0.020000	543	0.020000
544	0.020000	545	0.020000	546	0.020000
547	0.020000	548	0.020000	549	0.020000
550	0.020000	551	0.020000	552	0.020000
553	0.020000	554	0.020000	555	0.020000
556	0.020000	557	0.020000	558	0.020000
559	0.020000	560	0.020000	561	0.020000
562	0.020000	563	0.020000	564	0.020000
565	0.020000	566	0.020000	567	0.020000
568	0.020000	569	0.020000	570	0.020000
571	0.020000	572	0.020000	573	0.020000
574	0.020000	575	0.020000	576	0.020000
577	0.020000	578	0.020000	579	0.020000
580	0.020000	581	0.020000	582	0.020000
583	0.020000	584	0.020000	585	0.020000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.020000	587	0.020000	588	0.020000
589	0.020000	590	0.020000	591	0.020000
592	0.020000	593	0.020000	594	0.020000
595	0.020000	596	0.020000	597	0.020000
598	0.020000	599	0.020000	600	0.020000
601	0.020000	602	0.020000	603	0.020000
604	0.020000	605	0.020000	606	0.020000
607	0.020000	608	0.020000	609	0.020000
610	0.020000	611	0.020000	612	0.020000
613	0.020000	614	0.020000	615	0.020000
616	0.020000	617	0.020000	618	0.020000
619	0.020000	620	0.020000	621	0.020000
622	0.020000	623	0.020000	624	0.020000
625	0.020000	626	0.020000	627	0.020000
628	0.020000	629	0.020000	630	0.020000
631	0.020000	632	0.020000	633	0.020000
634	0.020000	635	0.020000	636	0.020000
637	0.020000	638	0.020000	639	0.020000
640	0.020000	641	0.020000	642	0.020000
643	0.020000	644	0.020000	645	0.020000
646	0.020000	647	0.020000	648	0.020000
649	0.020000	650	0.020000	651	0.020000
652	0.020000	653	0.020000	654	0.020000
655	0.020000	656	0.020000	657	0.020000
658	0.020000	659	0.020000	660	0.020000
661	0.020000	662	0.020000	663	0.020000
664	0.020000	665	0.020000	666	0.020000
667	0.020000	668	0.020000	669	0.020000
670	0.020000	671	0.020000	672	0.020000
673	0.020000	674	0.020000	675	0.020000
676	0.020000	677	0.020000	678	0.020000
679	0.020000	680	0.020000	681	0.020000
682	0.020000	683	0.020000	684	0.020000
685	0.020000	686	0.020000	687	0.020000
688	0.020000	689	0.020000	690	0.020000
691	0.020000	692	0.020000	693	0.020000
694	0.020000	695	0.020000	696	0.020000
697	0.020000	698	0.020000	699	0.020000
700	0.020000	701	0.020000	702	0.020000
703	0.020000	704	0.020000	705	0.020000
706	0.020000	707	0.020000	708	0.020000
709	0.020000	710	0.020000	711	0.020000
712	0.020000	713	0.020000	714	0.020000
715	0.020000	716	0.020000	717	0.020000
718	0.020000	719	0.020000	720	0.020000
721	0.020000	722	0.020000	723	0.020000
724	0.020000	725	0.020000	726	0.020000
727	0.020000	728	0.020000	729	0.020000
730	0.020000	731	0.020000	732	0.020000
733	0.020000	734	0.020000	735	0.020000
736	0.020000	737	0.020000	738	0.020000
739	0.020000	740	0.020000	741	0.020000

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.020000	743	0.020000	744	0.020000
745	0.020000	746	0.020000	747	0.020000
748	0.020000	749	0.020000	750	0.020000
751	0.020000	752	0.020000	753	0.020000
754	0.020000	755	0.020000	756	0.020000
757	0.020000	758	0.020000	759	0.020000
760	0.020000	761	0.020000	762	0.020000
763	0.020000	764	0.020000	765	0.020000
766	0.020000	767	0.020000	768	0.020000
769	0.020000	770	0.020000	771	0.020000
772	0.020000	773	0.020000	774	0.020000
775	0.020000	776	0.020000	777	0.020000
778	0.020000	779	0.020000	780	0.020000
781	0.020000	782	0.020000	783	0.020000
784	0.020000	785	0.020000	786	0.020000
787	0.020000	788	0.020000	789	0.020000
790	0.020000	791	0.020000	792	0.020000
793	0.020000	794	0.020000	795	0.020000
796	0.020000	797	0.020000	798	0.020000
799	0.020000	800	0.020000	801	0.020000
802	0.020000	803	0.020000	804	0.020000
805	0.020000	806	0.020000	807	0.020000
808	0.020000	809	0.020000	810	0.020000
811	0.020000	812	0.020000	813	0.020000
814	0.020000	815	0.020000	816	0.020000
817	0.020000	818	0.020000	819	0.020000
820	0.020000	821	0.020000	822	0.020000
823	0.020000	824	0.020000	825	0.020000
826	0.020000	827	0.020000	828	0.020000
829	0.020000	830	0.020000	831	0.020000
832	0.020000	833	0.020000	834	0.020000
835	0.020000	836	0.020000	837	0.020000
838	0.020000	839	0.020000	840	0.020000
841	0.020000	842	0.020000	843	0.020000
844	0.020000	845	0.020000	846	0.020000
847	0.020000	848	0.020000	849	0.020000
850	0.020000	851	0.020000	852	0.020000
853	0.020000	854	0.020000	855	0.020000
856	0.020000	857	0.020000	858	0.020000
859	0.020000	860	0.020000	861	0.020000
862	0.020000	863	0.020000	864	0.020000
865	0.020000	866	0.020000	867	0.020000
868	0.020000	869	0.020000	870	0.020000
871	0.020000	872	0.020000	873	0.020000
874	0.020000	875	0.020000	876	0.020000
877	0.020000	878	0.020000	879	0.020000
880	0.020000	881	0.020000	882	0.020000
883	0.020000	884	0.020000	885	0.020000
886	0.020000	887	0.020000	888	0.020000
889	0.020000	890	0.020000	891	0.020000
892	0.020000	893	0.020000	894	0.020000
895	0.020000	896	0.020000	897	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.020000	899	0.020000	900	0.020000
901	0.020000	902	0.020000	903	0.020000
904	0.020000	905	0.020000	906	0.020000
907	0.020000	908	0.020000	909	0.020000
910	0.020000	911	0.020000	912	0.020000
913	0.020000	914	0.020000	915	0.020000
916	0.020000	917	0.020000	918	0.020000
919	0.020000	920	0.020000	921	0.020000
922	0.020000	923	0.020000	924	0.020000
925	0.020000	926	0.020000	927	0.020000
928	0.020000	929	0.020000	930	0.020000
931	0.020000	932	0.020000	933	0.020000
934	0.020000	935	0.020000	936	0.020000
937	0.020000	938	0.020000	939	0.020000
940	0.020000	941	0.020000	942	0.020000
943	0.020000	944	0.020000	945	0.020000
946	0.020000	947	0.020000	948	0.020000
949	0.020000	950	0.020000	951	0.020000
952	0.020000	953	0.020000	954	0.020000
955	0.020000	956	0.020000	957	0.020000
958	0.020000	959	0.020000	960	0.020000
961	0.020000	962	0.020000	963	0.020000
964	0.020000	965	0.020000	966	0.020000
967	0.020000	968	0.020000	969	0.020000
970	0.020000	971	0.020000	972	0.020000
973	0.020000	974	0.020000	975	0.020000
976	0.020000	977	0.020000	978	0.020000
979	0.020000	980	0.020000	981	0.020000
982	0.020000	983	0.020000	984	0.020000
985	0.020000	986	0.020000	987	0.020000
988	0.020000	989	0.020000	990	0.020000
991	0.020000	992	0.020000	993	0.020000
994	0.020000	995	0.020000	996	0.020000
997	0.020000	998	0.020000	999	0.020000
1000	0.020000				

2.7 Problema: TRIGONOMETRIC

Informações:

- Número de variáveis: 1
- Iterações: 1
- Valor mínimo: 9.586354e-07
- Tempo de execução: 0.000s

Tabela 8: Valores das variáveis do problema TRIGONOMETRIC

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.000980				

2.8 Problema: EXTENDED ROSENBROCK

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 4.802080e+02
- Tempo de execução: 0.615s

Tabela 9: Valores das variáveis do problema EXTENDED ROSENBROCK

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.020000	2	0.000000	3	0.020000
4	0.000000	5	0.020000	6	0.000000
7	0.020000	8	0.000000	9	0.020000
10	0.000000	11	0.020000	12	0.000000
13	0.020000	14	0.000000	15	0.020000
16	0.000000	17	0.020000	18	0.000000
19	0.020000	20	0.000000	21	0.020000
22	0.000000	23	0.020000	24	0.000000
25	0.020000	26	0.000000	27	0.020000
28	0.000000	29	0.020000	30	0.000000
31	0.020000	32	0.000000	33	0.020000
34	0.000000	35	0.020000	36	0.000000
37	0.020000	38	0.000000	39	0.020000
40	0.000000	41	0.020000	42	0.000000
43	0.020000	44	0.000000	45	0.020000
46	0.000000	47	0.020000	48	0.000000
49	0.020000	50	0.000000	51	0.020000
52	0.000000	53	0.020000	54	0.000000
55	0.020000	56	0.000000	57	0.020000
58	0.000000	59	0.020000	60	0.000000
61	0.020000	62	0.000000	63	0.020000
64	0.000000	65	0.020000	66	0.000000
67	0.020000	68	0.000000	69	0.020000
70	0.000000	71	0.020000	72	0.000000
73	0.020000	74	0.000000	75	0.020000
76	0.000000	77	0.020000	78	0.000000
79	0.020000	80	0.000000	81	0.020000
82	0.000000	83	0.020000	84	0.000000
85	0.020000	86	0.000000	87	0.020000
88	0.000000	89	0.020000	90	0.000000
91	0.020000	92	0.000000	93	0.020000
94	0.000000	95	0.020000	96	0.000000
97	0.020000	98	0.000000	99	0.020000
100	0.000000	101	0.020000	102	0.000000
103	0.020000	104	0.000000	105	0.020000
106	0.000000	107	0.020000	108	0.000000
109	0.020000	110	0.000000	111	0.020000
112	0.000000	113	0.020000	114	0.000000
115	0.020000	116	0.000000	117	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.000000	119	0.020000	120	0.000000
121	0.020000	122	0.000000	123	0.020000
124	0.000000	125	0.020000	126	0.000000
127	0.020000	128	0.000000	129	0.020000
130	0.000000	131	0.020000	132	0.000000
133	0.020000	134	0.000000	135	0.020000
136	0.000000	137	0.020000	138	0.000000
139	0.020000	140	0.000000	141	0.020000
142	0.000000	143	0.020000	144	0.000000
145	0.020000	146	0.000000	147	0.020000
148	0.000000	149	0.020000	150	0.000000
151	0.020000	152	0.000000	153	0.020000
154	0.000000	155	0.020000	156	0.000000
157	0.020000	158	0.000000	159	0.020000
160	0.000000	161	0.020000	162	0.000000
163	0.020000	164	0.000000	165	0.020000
166	0.000000	167	0.020000	168	0.000000
169	0.020000	170	0.000000	171	0.020000
172	0.000000	173	0.020000	174	0.000000
175	0.020000	176	0.000000	177	0.020000
178	0.000000	179	0.020000	180	0.000000
181	0.020000	182	0.000000	183	0.020000
184	0.000000	185	0.020000	186	0.000000
187	0.020000	188	0.000000	189	0.020000
190	0.000000	191	0.020000	192	0.000000
193	0.020000	194	0.000000	195	0.020000
196	0.000000	197	0.020000	198	0.000000
199	0.020000	200	0.000000	201	0.020000
202	0.000000	203	0.020000	204	0.000000
205	0.020000	206	0.000000	207	0.020000
208	0.000000	209	0.020000	210	0.000000
211	0.020000	212	0.000000	213	0.020000
214	0.000000	215	0.020000	216	0.000000
217	0.020000	218	0.000000	219	0.020000
220	0.000000	221	0.020000	222	0.000000
223	0.020000	224	0.000000	225	0.020000
226	0.000000	227	0.020000	228	0.000000
229	0.020000	230	0.000000	231	0.020000
232	0.000000	233	0.020000	234	0.000000
235	0.020000	236	0.000000	237	0.020000
238	0.000000	239	0.020000	240	0.000000
241	0.020000	242	0.000000	243	0.020000
244	0.000000	245	0.020000	246	0.000000
247	0.020000	248	0.000000	249	0.020000
250	0.000000	251	0.020000	252	0.000000
253	0.020000	254	0.000000	255	0.020000
256	0.000000	257	0.020000	258	0.000000
259	0.020000	260	0.000000	261	0.020000
262	0.000000	263	0.020000	264	0.000000
265	0.020000	266	0.000000	267	0.020000
268	0.000000	269	0.020000	270	0.000000
271	0.020000	272	0.000000	273	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.000000	275	0.020000	276	0.000000
277	0.020000	278	0.000000	279	0.020000
280	0.000000	281	0.020000	282	0.000000
283	0.020000	284	0.000000	285	0.020000
286	0.000000	287	0.020000	288	0.000000
289	0.020000	290	0.000000	291	0.020000
292	0.000000	293	0.020000	294	0.000000
295	0.020000	296	0.000000	297	0.020000
298	0.000000	299	0.020000	300	0.000000
301	0.020000	302	0.000000	303	0.020000
304	0.000000	305	0.020000	306	0.000000
307	0.020000	308	0.000000	309	0.020000
310	0.000000	311	0.020000	312	0.000000
313	0.020000	314	0.000000	315	0.020000
316	0.000000	317	0.020000	318	0.000000
319	0.020000	320	0.000000	321	0.020000
322	0.000000	323	0.020000	324	0.000000
325	0.020000	326	0.000000	327	0.020000
328	0.000000	329	0.020000	330	0.000000
331	0.020000	332	0.000000	333	0.020000
334	0.000000	335	0.020000	336	0.000000
337	0.020000	338	0.000000	339	0.020000
340	0.000000	341	0.020000	342	0.000000
343	0.020000	344	0.000000	345	0.020000
346	0.000000	347	0.020000	348	0.000000
349	0.020000	350	0.000000	351	0.020000
352	0.000000	353	0.020000	354	0.000000
355	0.020000	356	0.000000	357	0.020000
358	0.000000	359	0.020000	360	0.000000
361	0.020000	362	0.000000	363	0.020000
364	0.000000	365	0.020000	366	0.000000
367	0.020000	368	0.000000	369	0.020000
370	0.000000	371	0.020000	372	0.000000
373	0.020000	374	0.000000	375	0.020000
376	0.000000	377	0.020000	378	0.000000
379	0.020000	380	0.000000	381	0.020000
382	0.000000	383	0.020000	384	0.000000
385	0.020000	386	0.000000	387	0.020000
388	0.000000	389	0.020000	390	0.000000
391	0.020000	392	0.000000	393	0.020000
394	0.000000	395	0.020000	396	0.000000
397	0.020000	398	0.000000	399	0.020000
400	0.000000	401	0.020000	402	0.000000
403	0.020000	404	0.000000	405	0.020000
406	0.000000	407	0.020000	408	0.000000
409	0.020000	410	0.000000	411	0.020000
412	0.000000	413	0.020000	414	0.000000
415	0.020000	416	0.000000	417	0.020000
418	0.000000	419	0.020000	420	0.000000
421	0.020000	422	0.000000	423	0.020000
424	0.000000	425	0.020000	426	0.000000
427	0.020000	428	0.000000	429	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.000000	431	0.020000	432	0.000000
433	0.020000	434	0.000000	435	0.020000
436	0.000000	437	0.020000	438	0.000000
439	0.020000	440	0.000000	441	0.020000
442	0.000000	443	0.020000	444	0.000000
445	0.020000	446	0.000000	447	0.020000
448	0.000000	449	0.020000	450	0.000000
451	0.020000	452	0.000000	453	0.020000
454	0.000000	455	0.020000	456	0.000000
457	0.020000	458	0.000000	459	0.020000
460	0.000000	461	0.020000	462	0.000000
463	0.020000	464	0.000000	465	0.020000
466	0.000000	467	0.020000	468	0.000000
469	0.020000	470	0.000000	471	0.020000
472	0.000000	473	0.020000	474	0.000000
475	0.020000	476	0.000000	477	0.020000
478	0.000000	479	0.020000	480	0.000000
481	0.020000	482	0.000000	483	0.020000
484	0.000000	485	0.020000	486	0.000000
487	0.020000	488	0.000000	489	0.020000
490	0.000000	491	0.020000	492	0.000000
493	0.020000	494	0.000000	495	0.020000
496	0.000000	497	0.020000	498	0.000000
499	0.020000	500	0.000000	501	0.020000
502	0.000000	503	0.020000	504	0.000000
505	0.020000	506	0.000000	507	0.020000
508	0.000000	509	0.020000	510	0.000000
511	0.020000	512	0.000000	513	0.020000
514	0.000000	515	0.020000	516	0.000000
517	0.020000	518	0.000000	519	0.020000
520	0.000000	521	0.020000	522	0.000000
523	0.020000	524	0.000000	525	0.020000
526	0.000000	527	0.020000	528	0.000000
529	0.020000	530	0.000000	531	0.020000
532	0.000000	533	0.020000	534	0.000000
535	0.020000	536	0.000000	537	0.020000
538	0.000000	539	0.020000	540	0.000000
541	0.020000	542	0.000000	543	0.020000
544	0.000000	545	0.020000	546	0.000000
547	0.020000	548	0.000000	549	0.020000
550	0.000000	551	0.020000	552	0.000000
553	0.020000	554	0.000000	555	0.020000
556	0.000000	557	0.020000	558	0.000000
559	0.020000	560	0.000000	561	0.020000
562	0.000000	563	0.020000	564	0.000000
565	0.020000	566	0.000000	567	0.020000
568	0.000000	569	0.020000	570	0.000000
571	0.020000	572	0.000000	573	0.020000
574	0.000000	575	0.020000	576	0.000000
577	0.020000	578	0.000000	579	0.020000
580	0.000000	581	0.020000	582	0.000000
583	0.020000	584	0.000000	585	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.000000	587	0.020000	588	0.000000
589	0.020000	590	0.000000	591	0.020000
592	0.000000	593	0.020000	594	0.000000
595	0.020000	596	0.000000	597	0.020000
598	0.000000	599	0.020000	600	0.000000
601	0.020000	602	0.000000	603	0.020000
604	0.000000	605	0.020000	606	0.000000
607	0.020000	608	0.000000	609	0.020000
610	0.000000	611	0.020000	612	0.000000
613	0.020000	614	0.000000	615	0.020000
616	0.000000	617	0.020000	618	0.000000
619	0.020000	620	0.000000	621	0.020000
622	0.000000	623	0.020000	624	0.000000
625	0.020000	626	0.000000	627	0.020000
628	0.000000	629	0.020000	630	0.000000
631	0.020000	632	0.000000	633	0.020000
634	0.000000	635	0.020000	636	0.000000
637	0.020000	638	0.000000	639	0.020000
640	0.000000	641	0.020000	642	0.000000
643	0.020000	644	0.000000	645	0.020000
646	0.000000	647	0.020000	648	0.000000
649	0.020000	650	0.000000	651	0.020000
652	0.000000	653	0.020000	654	0.000000
655	0.020000	656	0.000000	657	0.020000
658	0.000000	659	0.020000	660	0.000000
661	0.020000	662	0.000000	663	0.020000
664	0.000000	665	0.020000	666	0.000000
667	0.020000	668	0.000000	669	0.020000
670	0.000000	671	0.020000	672	0.000000
673	0.020000	674	0.000000	675	0.020000
676	0.000000	677	0.020000	678	0.000000
679	0.020000	680	0.000000	681	0.020000
682	0.000000	683	0.020000	684	0.000000
685	0.020000	686	0.000000	687	0.020000
688	0.000000	689	0.020000	690	0.000000
691	0.020000	692	0.000000	693	0.020000
694	0.000000	695	0.020000	696	0.000000
697	0.020000	698	0.000000	699	0.020000
700	0.000000	701	0.020000	702	0.000000
703	0.020000	704	0.000000	705	0.020000
706	0.000000	707	0.020000	708	0.000000
709	0.020000	710	0.000000	711	0.020000
712	0.000000	713	0.020000	714	0.000000
715	0.020000	716	0.000000	717	0.020000
718	0.000000	719	0.020000	720	0.000000
721	0.020000	722	0.000000	723	0.020000
724	0.000000	725	0.020000	726	0.000000
727	0.020000	728	0.000000	729	0.020000
730	0.000000	731	0.020000	732	0.000000
733	0.020000	734	0.000000	735	0.020000
736	0.000000	737	0.020000	738	0.000000
739	0.020000	740	0.000000	741	0.020000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.000000	743	0.020000	744	0.000000
745	0.020000	746	0.000000	747	0.020000
748	0.000000	749	0.020000	750	0.000000
751	0.020000	752	0.000000	753	0.020000
754	0.000000	755	0.020000	756	0.000000
757	0.020000	758	0.000000	759	0.020000
760	0.000000	761	0.020000	762	0.000000
763	0.020000	764	0.000000	765	0.020000
766	0.000000	767	0.020000	768	0.000000
769	0.020000	770	0.000000	771	0.020000
772	0.000000	773	0.020000	774	0.000000
775	0.020000	776	0.000000	777	0.020000
778	0.000000	779	0.020000	780	0.000000
781	0.020000	782	0.000000	783	0.020000
784	0.000000	785	0.020000	786	0.000000
787	0.020000	788	0.000000	789	0.020000
790	0.000000	791	0.020000	792	0.000000
793	0.020000	794	0.000000	795	0.020000
796	0.000000	797	0.020000	798	0.000000
799	0.020000	800	0.000000	801	0.020000
802	0.000000	803	0.020000	804	0.000000
805	0.020000	806	0.000000	807	0.020000
808	0.000000	809	0.020000	810	0.000000
811	0.020000	812	0.000000	813	0.020000
814	0.000000	815	0.020000	816	0.000000
817	0.020000	818	0.000000	819	0.020000
820	0.000000	821	0.020000	822	0.000000
823	0.020000	824	0.000000	825	0.020000
826	0.000000	827	0.020000	828	0.000000
829	0.020000	830	0.000000	831	0.020000
832	0.000000	833	0.020000	834	0.000000
835	0.020000	836	0.000000	837	0.020000
838	0.000000	839	0.020000	840	0.000000
841	0.020000	842	0.000000	843	0.020000
844	0.000000	845	0.020000	846	0.000000
847	0.020000	848	0.000000	849	0.020000
850	0.000000	851	0.020000	852	0.000000
853	0.020000	854	0.000000	855	0.020000
856	0.000000	857	0.020000	858	0.000000
859	0.020000	860	0.000000	861	0.020000
862	0.000000	863	0.020000	864	0.000000
865	0.020000	866	0.000000	867	0.020000
868	0.000000	869	0.020000	870	0.000000
871	0.020000	872	0.000000	873	0.020000
874	0.000000	875	0.020000	876	0.000000
877	0.020000	878	0.000000	879	0.020000
880	0.000000	881	0.020000	882	0.000000
883	0.020000	884	0.000000	885	0.020000
886	0.000000	887	0.020000	888	0.000000
889	0.020000	890	0.000000	891	0.020000
892	0.000000	893	0.020000	894	0.000000
895	0.020000	896	0.000000	897	0.020000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.000000	899	0.020000	900	0.000000
901	0.020000	902	0.000000	903	0.020000
904	0.000000	905	0.020000	906	0.000000
907	0.020000	908	0.000000	909	0.020000
910	0.000000	911	0.020000	912	0.000000
913	0.020000	914	0.000000	915	0.020000
916	0.000000	917	0.020000	918	0.000000
919	0.020000	920	0.000000	921	0.020000
922	0.000000	923	0.020000	924	0.000000
925	0.020000	926	0.000000	927	0.020000
928	0.000000	929	0.020000	930	0.000000
931	0.020000	932	0.000000	933	0.020000
934	0.000000	935	0.020000	936	0.000000
937	0.020000	938	0.000000	939	0.020000
940	0.000000	941	0.020000	942	0.000000
943	0.020000	944	0.000000	945	0.020000
946	0.000000	947	0.020000	948	0.000000
949	0.020000	950	0.000000	951	0.020000
952	0.000000	953	0.020000	954	0.000000
955	0.020000	956	0.000000	957	0.020000
958	0.000000	959	0.020000	960	0.000000
961	0.020000	962	0.000000	963	0.020000
964	0.000000	965	0.020000	966	0.000000
967	0.020000	968	0.000000	969	0.020000
970	0.000000	971	0.020000	972	0.000000
973	0.020000	974	0.000000	975	0.020000
976	0.000000	977	0.020000	978	0.000000
979	0.020000	980	0.000000	981	0.020000
982	0.000000	983	0.020000	984	0.000000
985	0.020000	986	0.000000	987	0.020000
988	0.000000	989	0.020000	990	0.000000
991	0.020000	992	0.000000	993	0.020000
994	0.000000	995	0.020000	996	0.000000
997	0.020000	998	0.000000	999	0.020000
1000	0.000000				

2.9 Problema: EXTENDED POWELL

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 0.000000e+00
- Tempo de execução: 0.823s

Tabela 10: Valores das variáveis do problema EXTENDED POWELL

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
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	0.000000	14	0.000000	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	0.000000
25	0.000000	26	0.000000	27	0.000000
28	0.000000	29	0.000000	30	0.000000
31	0.000000	32	0.000000	33	0.000000
34	0.000000	35	0.000000	36	0.000000
37	0.000000	38	0.000000	39	0.000000
40	0.000000	41	0.000000	42	0.000000
43	0.000000	44	0.000000	45	0.000000
46	0.000000	47	0.000000	48	0.000000
49	0.000000	50	0.000000	51	0.000000
52	0.000000	53	0.000000	54	0.000000
55	0.000000	56	0.000000	57	0.000000
58	0.000000	59	0.000000	60	0.000000
61	0.000000	62	0.000000	63	0.000000
64	0.000000	65	0.000000	66	0.000000
67	0.000000	68	0.000000	69	0.000000
70	0.000000	71	0.000000	72	0.000000
73	0.000000	74	0.000000	75	0.000000
76	0.000000	77	0.000000	78	0.000000
79	0.000000	80	0.000000	81	0.000000
82	0.000000	83	0.000000	84	0.000000
85	0.000000	86	0.000000	87	0.000000
88	0.000000	89	0.000000	90	0.000000
91	0.000000	92	0.000000	93	0.000000
94	0.000000	95	0.000000	96	0.000000
97	0.000000	98	0.000000	99	0.000000
100	0.000000	101	0.000000	102	0.000000
103	0.000000	104	0.000000	105	0.000000
106	0.000000	107	0.000000	108	0.000000
109	0.000000	110	0.000000	111	0.000000
112	0.000000	113	0.000000	114	0.000000
115	0.000000	116	0.000000	117	0.000000

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.000000	119	0.000000	120	0.000000
121	0.000000	122	0.000000	123	0.000000
124	0.000000	125	0.000000	126	0.000000
127	0.000000	128	0.000000	129	0.000000
130	0.000000	131	0.000000	132	0.000000
133	0.000000	134	0.000000	135	0.000000
136	0.000000	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	0.000000
148	0.000000	149	0.000000	150	0.000000
151	0.000000	152	0.000000	153	0.000000
154	0.000000	155	0.000000	156	0.000000
157	0.000000	158	0.000000	159	0.000000
160	0.000000	161	0.000000	162	0.000000
163	0.000000	164	0.000000	165	0.000000
166	0.000000	167	0.000000	168	0.000000
169	0.000000	170	0.000000	171	0.000000
172	0.000000	173	0.000000	174	0.000000
175	0.000000	176	0.000000	177	0.000000
178	0.000000	179	0.000000	180	0.000000
181	0.000000	182	0.000000	183	0.000000
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	0.000000
193	0.000000	194	0.000000	195	0.000000
196	0.000000	197	0.000000	198	0.000000
199	0.000000	200	0.000000	201	0.000000
202	0.000000	203	0.000000	204	0.000000
205	0.000000	206	0.000000	207	0.000000
208	0.000000	209	0.000000	210	0.000000
211	0.000000	212	0.000000	213	0.000000
214	0.000000	215	0.000000	216	0.000000
217	0.000000	218	0.000000	219	0.000000
220	0.000000	221	0.000000	222	0.000000
223	0.000000	224	0.000000	225	0.000000
226	0.000000	227	0.000000	228	0.000000
229	0.000000	230	0.000000	231	0.000000
232	0.000000	233	0.000000	234	0.000000
235	0.000000	236	0.000000	237	0.000000
238	0.000000	239	0.000000	240	0.000000
241	0.000000	242	0.000000	243	0.000000
244	0.000000	245	0.000000	246	0.000000
247	0.000000	248	0.000000	249	0.000000
250	0.000000	251	0.000000	252	0.000000
253	0.000000	254	0.000000	255	0.000000
256	0.000000	257	0.000000	258	0.000000
259	0.000000	260	0.000000	261	0.000000
262	0.000000	263	0.000000	264	0.000000
265	0.000000	266	0.000000	267	0.000000
268	0.000000	269	0.000000	270	0.000000
271	0.000000	272	0.000000	273	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.000000	275	0.000000	276	0.000000
277	0.000000	278	0.000000	279	0.000000
280	0.000000	281	0.000000	282	0.000000
283	0.000000	284	0.000000	285	0.000000
286	0.000000	287	0.000000	288	0.000000
289	0.000000	290	0.000000	291	0.000000
292	0.000000	293	0.000000	294	0.000000
295	0.000000	296	0.000000	297	0.000000
298	0.000000	299	0.000000	300	0.000000
301	0.000000	302	0.000000	303	0.000000
304	0.000000	305	0.000000	306	0.000000
307	0.000000	308	0.000000	309	0.000000
310	0.000000	311	0.000000	312	0.000000
313	0.000000	314	0.000000	315	0.000000
316	0.000000	317	0.000000	318	0.000000
319	0.000000	320	0.000000	321	0.000000
322	0.000000	323	0.000000	324	0.000000
325	0.000000	326	0.000000	327	0.000000
328	0.000000	329	0.000000	330	0.000000
331	0.000000	332	0.000000	333	0.000000
334	0.000000	335	0.000000	336	0.000000
337	0.000000	338	0.000000	339	0.000000
340	0.000000	341	0.000000	342	0.000000
343	0.000000	344	0.000000	345	0.000000
346	0.000000	347	0.000000	348	0.000000
349	0.000000	350	0.000000	351	0.000000
352	0.000000	353	0.000000	354	0.000000
355	0.000000	356	0.000000	357	0.000000
358	0.000000	359	0.000000	360	0.000000
361	0.000000	362	0.000000	363	0.000000
364	0.000000	365	0.000000	366	0.000000
367	0.000000	368	0.000000	369	0.000000
370	0.000000	371	0.000000	372	0.000000
373	0.000000	374	0.000000	375	0.000000
376	0.000000	377	0.000000	378	0.000000
379	0.000000	380	0.000000	381	0.000000
382	0.000000	383	0.000000	384	0.000000
385	0.000000	386	0.000000	387	0.000000
388	0.000000	389	0.000000	390	0.000000
391	0.000000	392	0.000000	393	0.000000
394	0.000000	395	0.000000	396	0.000000
397	0.000000	398	0.000000	399	0.000000
400	0.000000	401	0.000000	402	0.000000
403	0.000000	404	0.000000	405	0.000000
406	0.000000	407	0.000000	408	0.000000
409	0.000000	410	0.000000	411	0.000000
412	0.000000	413	0.000000	414	0.000000
415	0.000000	416	0.000000	417	0.000000
418	0.000000	419	0.000000	420	0.000000
421	0.000000	422	0.000000	423	0.000000
424	0.000000	425	0.000000	426	0.000000
427	0.000000	428	0.000000	429	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.000000	431	0.000000	432	0.000000
433	0.000000	434	0.000000	435	0.000000
436	0.000000	437	0.000000	438	0.000000
439	0.000000	440	0.000000	441	0.000000
442	0.000000	443	0.000000	444	0.000000
445	0.000000	446	0.000000	447	0.000000
448	0.000000	449	0.000000	450	0.000000
451	0.000000	452	0.000000	453	0.000000
454	0.000000	455	0.000000	456	0.000000
457	0.000000	458	0.000000	459	0.000000
460	0.000000	461	0.000000	462	0.000000
463	0.000000	464	0.000000	465	0.000000
466	0.000000	467	0.000000	468	0.000000
469	0.000000	470	0.000000	471	0.000000
472	0.000000	473	0.000000	474	0.000000
475	0.000000	476	0.000000	477	0.000000
478	0.000000	479	0.000000	480	0.000000
481	0.000000	482	0.000000	483	0.000000
484	0.000000	485	0.000000	486	0.000000
487	0.000000	488	0.000000	489	0.000000
490	0.000000	491	0.000000	492	0.000000
493	0.000000	494	0.000000	495	0.000000
496	0.000000	497	0.000000	498	0.000000
499	0.000000	500	0.000000	501	0.000000
502	0.000000	503	0.000000	504	0.000000
505	0.000000	506	0.000000	507	0.000000
508	0.000000	509	0.000000	510	0.000000
511	0.000000	512	0.000000	513	0.000000
514	0.000000	515	0.000000	516	0.000000
517	0.000000	518	0.000000	519	0.000000
520	0.000000	521	0.000000	522	0.000000
523	0.000000	524	0.000000	525	0.000000
526	0.000000	527	0.000000	528	0.000000
529	0.000000	530	0.000000	531	0.000000
532	0.000000	533	0.000000	534	0.000000
535	0.000000	536	0.000000	537	0.000000
538	0.000000	539	0.000000	540	0.000000
541	0.000000	542	0.000000	543	0.000000
544	0.000000	545	0.000000	546	0.000000
547	0.000000	548	0.000000	549	0.000000
550	0.000000	551	0.000000	552	0.000000
553	0.000000	554	0.000000	555	0.000000
556	0.000000	557	0.000000	558	0.000000
559	0.000000	560	0.000000	561	0.000000
562	0.000000	563	0.000000	564	0.000000
565	0.000000	566	0.000000	567	0.000000
568	0.000000	569	0.000000	570	0.000000
571	0.000000	572	0.000000	573	0.000000
574	0.000000	575	0.000000	576	0.000000
577	0.000000	578	0.000000	579	0.000000
580	0.000000	581	0.000000	582	0.000000
583	0.000000	584	0.000000	585	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.000000	587	0.000000	588	0.000000
589	0.000000	590	0.000000	591	0.000000
592	0.000000	593	0.000000	594	0.000000
595	0.000000	596	0.000000	597	0.000000
598	0.000000	599	0.000000	600	0.000000
601	0.000000	602	0.000000	603	0.000000
604	0.000000	605	0.000000	606	0.000000
607	0.000000	608	0.000000	609	0.000000
610	0.000000	611	0.000000	612	0.000000
613	0.000000	614	0.000000	615	0.000000
616	0.000000	617	0.000000	618	0.000000
619	0.000000	620	0.000000	621	0.000000
622	0.000000	623	0.000000	624	0.000000
625	0.000000	626	0.000000	627	0.000000
628	0.000000	629	0.000000	630	0.000000
631	0.000000	632	0.000000	633	0.000000
634	0.000000	635	0.000000	636	0.000000
637	0.000000	638	0.000000	639	0.000000
640	0.000000	641	0.000000	642	0.000000
643	0.000000	644	0.000000	645	0.000000
646	0.000000	647	0.000000	648	0.000000
649	0.000000	650	0.000000	651	0.000000
652	0.000000	653	0.000000	654	0.000000
655	0.000000	656	0.000000	657	0.000000
658	0.000000	659	0.000000	660	0.000000
661	0.000000	662	0.000000	663	0.000000
664	0.000000	665	0.000000	666	0.000000
667	0.000000	668	0.000000	669	0.000000
670	0.000000	671	0.000000	672	0.000000
673	0.000000	674	0.000000	675	0.000000
676	0.000000	677	0.000000	678	0.000000
679	0.000000	680	0.000000	681	0.000000
682	0.000000	683	0.000000	684	0.000000
685	0.000000	686	0.000000	687	0.000000
688	0.000000	689	0.000000	690	0.000000
691	0.000000	692	0.000000	693	0.000000
694	0.000000	695	0.000000	696	0.000000
697	0.000000	698	0.000000	699	0.000000
700	0.000000	701	0.000000	702	0.000000
703	0.000000	704	0.000000	705	0.000000
706	0.000000	707	0.000000	708	0.000000
709	0.000000	710	0.000000	711	0.000000
712	0.000000	713	0.000000	714	0.000000
715	0.000000	716	0.000000	717	0.000000
718	0.000000	719	0.000000	720	0.000000
721	0.000000	722	0.000000	723	0.000000
724	0.000000	725	0.000000	726	0.000000
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	0.000000
736	0.000000	737	0.000000	738	0.000000
739	0.000000	740	0.000000	741	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.000000	743	0.000000	744	0.000000
745	0.000000	746	0.000000	747	0.000000
748	0.000000	749	0.000000	750	0.000000
751	0.000000	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	0.000000	762	0.000000
763	0.000000	764	0.000000	765	0.000000
766	0.000000	767	0.000000	768	0.000000
769	0.000000	770	0.000000	771	0.000000
772	0.000000	773	0.000000	774	0.000000
775	0.000000	776	0.000000	777	0.000000
778	0.000000	779	0.000000	780	0.000000
781	0.000000	782	0.000000	783	0.000000
784	0.000000	785	0.000000	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	0.000000
805	0.000000	806	0.000000	807	0.000000
808	0.000000	809	0.000000	810	0.000000
811	0.000000	812	0.000000	813	0.000000
814	0.000000	815	0.000000	816	0.000000
817	0.000000	818	0.000000	819	0.000000
820	0.000000	821	0.000000	822	0.000000
823	0.000000	824	0.000000	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	0.000000	836	0.000000	837	0.000000
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	0.000000	848	0.000000	849	0.000000
850	0.000000	851	0.000000	852	0.000000
853	0.000000	854	0.000000	855	0.000000
856	0.000000	857	0.000000	858	0.000000
859	0.000000	860	0.000000	861	0.000000
862	0.000000	863	0.000000	864	0.000000
865	0.000000	866	0.000000	867	0.000000
868	0.000000	869	0.000000	870	0.000000
871	0.000000	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	0.000000	891	0.000000
892	0.000000	893	0.000000	894	0.000000
895	0.000000	896	0.000000	897	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.000000	899	0.000000	900	0.000000
901	0.000000	902	0.000000	903	0.000000
904	0.000000	905	0.000000	906	0.000000
907	0.000000	908	0.000000	909	0.000000
910	0.000000	911	0.000000	912	0.000000
913	0.000000	914	0.000000	915	0.000000
916	0.000000	917	0.000000	918	0.000000
919	0.000000	920	0.000000	921	0.000000
922	0.000000	923	0.000000	924	0.000000
925	0.000000	926	0.000000	927	0.000000
928	0.000000	929	0.000000	930	0.000000
931	0.000000	932	0.000000	933	0.000000
934	0.000000	935	0.000000	936	0.000000
937	0.000000	938	0.000000	939	0.000000
940	0.000000	941	0.000000	942	0.000000
943	0.000000	944	0.000000	945	0.000000
946	0.000000	947	0.000000	948	0.000000
949	0.000000	950	0.000000	951	0.000000
952	0.000000	953	0.000000	954	0.000000
955	0.000000	956	0.000000	957	0.000000
958	0.000000	959	0.000000	960	0.000000
961	0.000000	962	0.000000	963	0.000000
964	0.000000	965	0.000000	966	0.000000
967	0.000000	968	0.000000	969	0.000000
970	0.000000	971	0.000000	972	0.000000
973	0.000000	974	0.000000	975	0.000000
976	0.000000	977	0.000000	978	0.000000
979	0.000000	980	0.000000	981	0.000000
982	0.000000	983	0.000000	984	0.000000
985	0.000000	986	0.000000	987	0.000000
988	0.000000	989	0.000000	990	0.000000
991	0.000000	992	0.000000	993	0.000000
994	0.000000	995	0.000000	996	0.000000
997	0.000000	998	0.000000	999	0.000000
1000	0.000000				

2.10 Problema: QOR

Informações:

- Número de variáveis: 50
- Iterações: 1
- Valor mínimo: 2.254179e+03
- Tempo de execução: 0.000s

Tabela 11: Valores das variáveis do problema QOR

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.146946	2	0.127029	3	0.174386
4	0.119646	5	0.167839	6	0.164218
7	0.133087	8	0.145693	9	0.118393
10	0.113936	11	0.171321	12	0.147364
13	0.194304	14	0.181768	15	0.109479
16	0.099729	17	0.062957	18	0.110036
19	0.100007	20	0.174804	21	0.183579
22	0.152796	23	0.168118	24	0.137057
25	0.102445	26	0.117000	27	0.143812
28	0.172784	29	0.113518	30	0.103768
31	0.133018	32	0.119925	33	0.201825
34	0.146807	35	0.069086	36	0.152936
37	0.126889	38	0.115746	39	0.123546
40	0.168118	41	0.126471	42	0.160457
43	0.125079	44	0.209346	45	0.091929
46	0.064071	47	0.038304	48	0.164636
49	0.089143	50	0.166864		

2.11 Problema: GOR

Informações:

- Número de variáveis: 50
- Iterações: 1
- Valor mínimo: 4.680460e+03
- Tempo de execução: 0.002s

Tabela 12: Valores das variáveis do problema GOR

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.096770	2	0.209464	3	0.080354
4	0.178373	5	0.171626	6	0.113065
7	0.131995	8	0.070960	9	0.065262
10	0.203105	11	0.140767	12	0.250633
13	0.223134	14	0.054596	15	0.023432
16	-0.055338	17	0.050452	18	0.035070
19	0.193868	20	0.210088	21	0.134805
22	0.184782	23	0.113452	24	0.041501
25	0.064114	26	0.122854	27	0.193023
28	0.064440	29	0.050658	30	0.103715
31	0.081622	32	0.257541	33	0.136191
34	-0.033676	35	0.150844	36	0.091297
37	0.074282	38	0.094883	39	0.177406
40	0.105591	41	0.167787	42	0.078950
43	0.304794	44	-0.015719	45	-0.077448
46	-0.135299	47	0.173833	48	0.006086
49	0.177177	50	0.136512		

2.12 Problema: PSP

Informações:

- Número de variáveis: 50
- Iterações: 1000
- Valor mínimo: 1.173821e+03
- Tempo de execução: 7.347s

Tabela 13: Valores das variáveis do problema PSP

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	1.000000	2	1.000000	3	1.000000
4	1.000000	5	1.000000	6	1.000000
7	1.000000	8	1.000000	9	1.000000
10	1.000000	11	1.000000	12	1.000000
13	1.000000	14	1.000000	15	1.000000
16	1.000000	17	1.000000	18	1.000000
19	1.000000	20	1.000000	21	1.000000
22	1.000000	23	1.000000	24	1.000000
25	1.000000	26	1.000000	27	1.000000
28	1.000000	29	1.000000	30	1.000000
31	1.000000	32	1.000000	33	1.000000
34	1.000000	35	1.000000	36	1.000000
37	1.000000	38	1.000000	39	1.000000
40	1.000000	41	1.000000	42	1.000000
43	1.000000	44	1.000000	45	1.000000
46	1.000000	47	1.000000	48	1.000000
49	1.000000	50	1.000000		

2.13 Problema: TRIDIAGONAL

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 9.608000e-01
- Tempo de execução: 0.663s

Tabela 14: Valores das variáveis do problema TRIDIAGONAL

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.020000	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	0.000000	14	0.000000	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	0.000000
25	0.000000	26	0.000000	27	0.000000
28	0.000000	29	0.000000	30	0.000000
31	0.000000	32	0.000000	33	0.000000
34	0.000000	35	0.000000	36	0.000000
37	0.000000	38	0.000000	39	0.000000
40	0.000000	41	0.000000	42	0.000000
43	0.000000	44	0.000000	45	0.000000
46	0.000000	47	0.000000	48	0.000000
49	0.000000	50	0.000000	51	0.000000
52	0.000000	53	0.000000	54	0.000000
55	0.000000	56	0.000000	57	0.000000
58	0.000000	59	0.000000	60	0.000000
61	0.000000	62	0.000000	63	0.000000
64	0.000000	65	0.000000	66	0.000000
67	0.000000	68	0.000000	69	0.000000
70	0.000000	71	0.000000	72	0.000000
73	0.000000	74	0.000000	75	0.000000
76	0.000000	77	0.000000	78	0.000000
79	0.000000	80	0.000000	81	0.000000
82	0.000000	83	0.000000	84	0.000000
85	0.000000	86	0.000000	87	0.000000
88	0.000000	89	0.000000	90	0.000000
91	0.000000	92	0.000000	93	0.000000
94	0.000000	95	0.000000	96	0.000000
97	0.000000	98	0.000000	99	0.000000
100	0.000000	101	0.000000	102	0.000000
103	0.000000	104	0.000000	105	0.000000
106	0.000000	107	0.000000	108	0.000000
109	0.000000	110	0.000000	111	0.000000
112	0.000000	113	0.000000	114	0.000000
115	0.000000	116	0.000000	117	0.000000

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.000000	119	0.000000	120	0.000000
121	0.000000	122	0.000000	123	0.000000
124	0.000000	125	0.000000	126	0.000000
127	0.000000	128	0.000000	129	0.000000
130	0.000000	131	0.000000	132	0.000000
133	0.000000	134	0.000000	135	0.000000
136	0.000000	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	0.000000
148	0.000000	149	0.000000	150	0.000000
151	0.000000	152	0.000000	153	0.000000
154	0.000000	155	0.000000	156	0.000000
157	0.000000	158	0.000000	159	0.000000
160	0.000000	161	0.000000	162	0.000000
163	0.000000	164	0.000000	165	0.000000
166	0.000000	167	0.000000	168	0.000000
169	0.000000	170	0.000000	171	0.000000
172	0.000000	173	0.000000	174	0.000000
175	0.000000	176	0.000000	177	0.000000
178	0.000000	179	0.000000	180	0.000000
181	0.000000	182	0.000000	183	0.000000
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	0.000000
193	0.000000	194	0.000000	195	0.000000
196	0.000000	197	0.000000	198	0.000000
199	0.000000	200	0.000000	201	0.000000
202	0.000000	203	0.000000	204	0.000000
205	0.000000	206	0.000000	207	0.000000
208	0.000000	209	0.000000	210	0.000000
211	0.000000	212	0.000000	213	0.000000
214	0.000000	215	0.000000	216	0.000000
217	0.000000	218	0.000000	219	0.000000
220	0.000000	221	0.000000	222	0.000000
223	0.000000	224	0.000000	225	0.000000
226	0.000000	227	0.000000	228	0.000000
229	0.000000	230	0.000000	231	0.000000
232	0.000000	233	0.000000	234	0.000000
235	0.000000	236	0.000000	237	0.000000
238	0.000000	239	0.000000	240	0.000000
241	0.000000	242	0.000000	243	0.000000
244	0.000000	245	0.000000	246	0.000000
247	0.000000	248	0.000000	249	0.000000
250	0.000000	251	0.000000	252	0.000000
253	0.000000	254	0.000000	255	0.000000
256	0.000000	257	0.000000	258	0.000000
259	0.000000	260	0.000000	261	0.000000
262	0.000000	263	0.000000	264	0.000000
265	0.000000	266	0.000000	267	0.000000
268	0.000000	269	0.000000	270	0.000000
271	0.000000	272	0.000000	273	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.000000	275	0.000000	276	0.000000
277	0.000000	278	0.000000	279	0.000000
280	0.000000	281	0.000000	282	0.000000
283	0.000000	284	0.000000	285	0.000000
286	0.000000	287	0.000000	288	0.000000
289	0.000000	290	0.000000	291	0.000000
292	0.000000	293	0.000000	294	0.000000
295	0.000000	296	0.000000	297	0.000000
298	0.000000	299	0.000000	300	0.000000
301	0.000000	302	0.000000	303	0.000000
304	0.000000	305	0.000000	306	0.000000
307	0.000000	308	0.000000	309	0.000000
310	0.000000	311	0.000000	312	0.000000
313	0.000000	314	0.000000	315	0.000000
316	0.000000	317	0.000000	318	0.000000
319	0.000000	320	0.000000	321	0.000000
322	0.000000	323	0.000000	324	0.000000
325	0.000000	326	0.000000	327	0.000000
328	0.000000	329	0.000000	330	0.000000
331	0.000000	332	0.000000	333	0.000000
334	0.000000	335	0.000000	336	0.000000
337	0.000000	338	0.000000	339	0.000000
340	0.000000	341	0.000000	342	0.000000
343	0.000000	344	0.000000	345	0.000000
346	0.000000	347	0.000000	348	0.000000
349	0.000000	350	0.000000	351	0.000000
352	0.000000	353	0.000000	354	0.000000
355	0.000000	356	0.000000	357	0.000000
358	0.000000	359	0.000000	360	0.000000
361	0.000000	362	0.000000	363	0.000000
364	0.000000	365	0.000000	366	0.000000
367	0.000000	368	0.000000	369	0.000000
370	0.000000	371	0.000000	372	0.000000
373	0.000000	374	0.000000	375	0.000000
376	0.000000	377	0.000000	378	0.000000
379	0.000000	380	0.000000	381	0.000000
382	0.000000	383	0.000000	384	0.000000
385	0.000000	386	0.000000	387	0.000000
388	0.000000	389	0.000000	390	0.000000
391	0.000000	392	0.000000	393	0.000000
394	0.000000	395	0.000000	396	0.000000
397	0.000000	398	0.000000	399	0.000000
400	0.000000	401	0.000000	402	0.000000
403	0.000000	404	0.000000	405	0.000000
406	0.000000	407	0.000000	408	0.000000
409	0.000000	410	0.000000	411	0.000000
412	0.000000	413	0.000000	414	0.000000
415	0.000000	416	0.000000	417	0.000000
418	0.000000	419	0.000000	420	0.000000
421	0.000000	422	0.000000	423	0.000000
424	0.000000	425	0.000000	426	0.000000
427	0.000000	428	0.000000	429	0.000000

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.000000	431	0.000000	432	0.000000
433	0.000000	434	0.000000	435	0.000000
436	0.000000	437	0.000000	438	0.000000
439	0.000000	440	0.000000	441	0.000000
442	0.000000	443	0.000000	444	0.000000
445	0.000000	446	0.000000	447	0.000000
448	0.000000	449	0.000000	450	0.000000
451	0.000000	452	0.000000	453	0.000000
454	0.000000	455	0.000000	456	0.000000
457	0.000000	458	0.000000	459	0.000000
460	0.000000	461	0.000000	462	0.000000
463	0.000000	464	0.000000	465	0.000000
466	0.000000	467	0.000000	468	0.000000
469	0.000000	470	0.000000	471	0.000000
472	0.000000	473	0.000000	474	0.000000
475	0.000000	476	0.000000	477	0.000000
478	0.000000	479	0.000000	480	0.000000
481	0.000000	482	0.000000	483	0.000000
484	0.000000	485	0.000000	486	0.000000
487	0.000000	488	0.000000	489	0.000000
490	0.000000	491	0.000000	492	0.000000
493	0.000000	494	0.000000	495	0.000000
496	0.000000	497	0.000000	498	0.000000
499	0.000000	500	0.000000	501	0.000000
502	0.000000	503	0.000000	504	0.000000
505	0.000000	506	0.000000	507	0.000000
508	0.000000	509	0.000000	510	0.000000
511	0.000000	512	0.000000	513	0.000000
514	0.000000	515	0.000000	516	0.000000
517	0.000000	518	0.000000	519	0.000000
520	0.000000	521	0.000000	522	0.000000
523	0.000000	524	0.000000	525	0.000000
526	0.000000	527	0.000000	528	0.000000
529	0.000000	530	0.000000	531	0.000000
532	0.000000	533	0.000000	534	0.000000
535	0.000000	536	0.000000	537	0.000000
538	0.000000	539	0.000000	540	0.000000
541	0.000000	542	0.000000	543	0.000000
544	0.000000	545	0.000000	546	0.000000
547	0.000000	548	0.000000	549	0.000000
550	0.000000	551	0.000000	552	0.000000
553	0.000000	554	0.000000	555	0.000000
556	0.000000	557	0.000000	558	0.000000
559	0.000000	560	0.000000	561	0.000000
562	0.000000	563	0.000000	564	0.000000
565	0.000000	566	0.000000	567	0.000000
568	0.000000	569	0.000000	570	0.000000
571	0.000000	572	0.000000	573	0.000000
574	0.000000	575	0.000000	576	0.000000
577	0.000000	578	0.000000	579	0.000000
580	0.000000	581	0.000000	582	0.000000
583	0.000000	584	0.000000	585	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.000000	587	0.000000	588	0.000000
589	0.000000	590	0.000000	591	0.000000
592	0.000000	593	0.000000	594	0.000000
595	0.000000	596	0.000000	597	0.000000
598	0.000000	599	0.000000	600	0.000000
601	0.000000	602	0.000000	603	0.000000
604	0.000000	605	0.000000	606	0.000000
607	0.000000	608	0.000000	609	0.000000
610	0.000000	611	0.000000	612	0.000000
613	0.000000	614	0.000000	615	0.000000
616	0.000000	617	0.000000	618	0.000000
619	0.000000	620	0.000000	621	0.000000
622	0.000000	623	0.000000	624	0.000000
625	0.000000	626	0.000000	627	0.000000
628	0.000000	629	0.000000	630	0.000000
631	0.000000	632	0.000000	633	0.000000
634	0.000000	635	0.000000	636	0.000000
637	0.000000	638	0.000000	639	0.000000
640	0.000000	641	0.000000	642	0.000000
643	0.000000	644	0.000000	645	0.000000
646	0.000000	647	0.000000	648	0.000000
649	0.000000	650	0.000000	651	0.000000
652	0.000000	653	0.000000	654	0.000000
655	0.000000	656	0.000000	657	0.000000
658	0.000000	659	0.000000	660	0.000000
661	0.000000	662	0.000000	663	0.000000
664	0.000000	665	0.000000	666	0.000000
667	0.000000	668	0.000000	669	0.000000
670	0.000000	671	0.000000	672	0.000000
673	0.000000	674	0.000000	675	0.000000
676	0.000000	677	0.000000	678	0.000000
679	0.000000	680	0.000000	681	0.000000
682	0.000000	683	0.000000	684	0.000000
685	0.000000	686	0.000000	687	0.000000
688	0.000000	689	0.000000	690	0.000000
691	0.000000	692	0.000000	693	0.000000
694	0.000000	695	0.000000	696	0.000000
697	0.000000	698	0.000000	699	0.000000
700	0.000000	701	0.000000	702	0.000000
703	0.000000	704	0.000000	705	0.000000
706	0.000000	707	0.000000	708	0.000000
709	0.000000	710	0.000000	711	0.000000
712	0.000000	713	0.000000	714	0.000000
715	0.000000	716	0.000000	717	0.000000
718	0.000000	719	0.000000	720	0.000000
721	0.000000	722	0.000000	723	0.000000
724	0.000000	725	0.000000	726	0.000000
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	0.000000
736	0.000000	737	0.000000	738	0.000000
739	0.000000	740	0.000000	741	0.000000

Continúa na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.000000	743	0.000000	744	0.000000
745	0.000000	746	0.000000	747	0.000000
748	0.000000	749	0.000000	750	0.000000
751	0.000000	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	0.000000	762	0.000000
763	0.000000	764	0.000000	765	0.000000
766	0.000000	767	0.000000	768	0.000000
769	0.000000	770	0.000000	771	0.000000
772	0.000000	773	0.000000	774	0.000000
775	0.000000	776	0.000000	777	0.000000
778	0.000000	779	0.000000	780	0.000000
781	0.000000	782	0.000000	783	0.000000
784	0.000000	785	0.000000	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	0.000000
805	0.000000	806	0.000000	807	0.000000
808	0.000000	809	0.000000	810	0.000000
811	0.000000	812	0.000000	813	0.000000
814	0.000000	815	0.000000	816	0.000000
817	0.000000	818	0.000000	819	0.000000
820	0.000000	821	0.000000	822	0.000000
823	0.000000	824	0.000000	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	0.000000	836	0.000000	837	0.000000
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	0.000000	848	0.000000	849	0.000000
850	0.000000	851	0.000000	852	0.000000
853	0.000000	854	0.000000	855	0.000000
856	0.000000	857	0.000000	858	0.000000
859	0.000000	860	0.000000	861	0.000000
862	0.000000	863	0.000000	864	0.000000
865	0.000000	866	0.000000	867	0.000000
868	0.000000	869	0.000000	870	0.000000
871	0.000000	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	0.000000	891	0.000000
892	0.000000	893	0.000000	894	0.000000
895	0.000000	896	0.000000	897	0.000000

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.000000	899	0.000000	900	0.000000
901	0.000000	902	0.000000	903	0.000000
904	0.000000	905	0.000000	906	0.000000
907	0.000000	908	0.000000	909	0.000000
910	0.000000	911	0.000000	912	0.000000
913	0.000000	914	0.000000	915	0.000000
916	0.000000	917	0.000000	918	0.000000
919	0.000000	920	0.000000	921	0.000000
922	0.000000	923	0.000000	924	0.000000
925	0.000000	926	0.000000	927	0.000000
928	0.000000	929	0.000000	930	0.000000
931	0.000000	932	0.000000	933	0.000000
934	0.000000	935	0.000000	936	0.000000
937	0.000000	938	0.000000	939	0.000000
940	0.000000	941	0.000000	942	0.000000
943	0.000000	944	0.000000	945	0.000000
946	0.000000	947	0.000000	948	0.000000
949	0.000000	950	0.000000	951	0.000000
952	0.000000	953	0.000000	954	0.000000
955	0.000000	956	0.000000	957	0.000000
958	0.000000	959	0.000000	960	0.000000
961	0.000000	962	0.000000	963	0.000000
964	0.000000	965	0.000000	966	0.000000
967	0.000000	968	0.000000	969	0.000000
970	0.000000	971	0.000000	972	0.000000
973	0.000000	974	0.000000	975	0.000000
976	0.000000	977	0.000000	978	0.000000
979	0.000000	980	0.000000	981	0.000000
982	0.000000	983	0.000000	984	0.000000
985	0.000000	986	0.000000	987	0.000000
988	0.000000	989	0.000000	990	0.000000
991	0.000000	992	0.000000	993	0.000000
994	0.000000	995	0.000000	996	0.000000
997	0.000000	998	0.000000	999	0.000000
1000	0.000000				

2.14 Problema: ENGGVAL1

Informações:

- Número de variáveis: 1000
- Iterações: 1
- Valor mínimo: 2.871840e+03
- Tempo de execução: 1.213s

Tabela 15: Valores das variáveis do problema ENGGVAL1

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.031322	2	0.031322	3	0.031322
4	0.031322	5	0.031322	6	0.031322
7	0.031322	8	0.031322	9	0.031322
10	0.031322	11	0.031322	12	0.031322
13	0.031322	14	0.031322	15	0.031322
16	0.031322	17	0.031322	18	0.031322
19	0.031322	20	0.031322	21	0.031322
22	0.031322	23	0.031322	24	0.031322
25	0.031322	26	0.031322	27	0.031322
28	0.031322	29	0.031322	30	0.031322
31	0.031322	32	0.031322	33	0.031322
34	0.031322	35	0.031322	36	0.031322
37	0.031322	38	0.031322	39	0.031322
40	0.031322	41	0.031322	42	0.031322
43	0.031322	44	0.031322	45	0.031322
46	0.031322	47	0.031322	48	0.031322
49	0.031322	50	0.031322	51	0.031322
52	0.031322	53	0.031322	54	0.031322
55	0.031322	56	0.031322	57	0.031322
58	0.031322	59	0.031322	60	0.031322
61	0.031322	62	0.031322	63	0.031322
64	0.031322	65	0.031322	66	0.031322
67	0.031322	68	0.031322	69	0.031322
70	0.031322	71	0.031322	72	0.031322
73	0.031322	74	0.031322	75	0.031322
76	0.031322	77	0.031322	78	0.031322
79	0.031322	80	0.031322	81	0.031322
82	0.031322	83	0.031322	84	0.031322
85	0.031322	86	0.031322	87	0.031322
88	0.031322	89	0.031322	90	0.031322
91	0.031322	92	0.031322	93	0.031322
94	0.031322	95	0.031322	96	0.031322
97	0.031322	98	0.031322	99	0.031322
100	0.031322	101	0.031322	102	0.031322
103	0.031322	104	0.031322	105	0.031322
106	0.031322	107	0.031322	108	0.031322
109	0.031322	110	0.031322	111	0.031322
112	0.031322	113	0.031322	114	0.031322
115	0.031322	116	0.031322	117	0.031322

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
118	0.031322	119	0.031322	120	0.031322
121	0.031322	122	0.031322	123	0.031322
124	0.031322	125	0.031322	126	0.031322
127	0.031322	128	0.031322	129	0.031322
130	0.031322	131	0.031322	132	0.031322
133	0.031322	134	0.031322	135	0.031322
136	0.031322	137	0.031322	138	0.031322
139	0.031322	140	0.031322	141	0.031322
142	0.031322	143	0.031322	144	0.031322
145	0.031322	146	0.031322	147	0.031322
148	0.031322	149	0.031322	150	0.031322
151	0.031322	152	0.031322	153	0.031322
154	0.031322	155	0.031322	156	0.031322
157	0.031322	158	0.031322	159	0.031322
160	0.031322	161	0.031322	162	0.031322
163	0.031322	164	0.031322	165	0.031322
166	0.031322	167	0.031322	168	0.031322
169	0.031322	170	0.031322	171	0.031322
172	0.031322	173	0.031322	174	0.031322
175	0.031322	176	0.031322	177	0.031322
178	0.031322	179	0.031322	180	0.031322
181	0.031322	182	0.031322	183	0.031322
184	0.031322	185	0.031322	186	0.031322
187	0.031322	188	0.031322	189	0.031322
190	0.031322	191	0.031322	192	0.031322
193	0.031322	194	0.031322	195	0.031322
196	0.031322	197	0.031322	198	0.031322
199	0.031322	200	0.031322	201	0.031322
202	0.031322	203	0.031322	204	0.031322
205	0.031322	206	0.031322	207	0.031322
208	0.031322	209	0.031322	210	0.031322
211	0.031322	212	0.031322	213	0.031322
214	0.031322	215	0.031322	216	0.031322
217	0.031322	218	0.031322	219	0.031322
220	0.031322	221	0.031322	222	0.031322
223	0.031322	224	0.031322	225	0.031322
226	0.031322	227	0.031322	228	0.031322
229	0.031322	230	0.031322	231	0.031322
232	0.031322	233	0.031322	234	0.031322
235	0.031322	236	0.031322	237	0.031322
238	0.031322	239	0.031322	240	0.031322
241	0.031322	242	0.031322	243	0.031322
244	0.031322	245	0.031322	246	0.031322
247	0.031322	248	0.031322	249	0.031322
250	0.031322	251	0.031322	252	0.031322
253	0.031322	254	0.031322	255	0.031322
256	0.031322	257	0.031322	258	0.031322
259	0.031322	260	0.031322	261	0.031322
262	0.031322	263	0.031322	264	0.031322
265	0.031322	266	0.031322	267	0.031322
268	0.031322	269	0.031322	270	0.031322
271	0.031322	272	0.031322	273	0.031322

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
274	0.031322	275	0.031322	276	0.031322
277	0.031322	278	0.031322	279	0.031322
280	0.031322	281	0.031322	282	0.031322
283	0.031322	284	0.031322	285	0.031322
286	0.031322	287	0.031322	288	0.031322
289	0.031322	290	0.031322	291	0.031322
292	0.031322	293	0.031322	294	0.031322
295	0.031322	296	0.031322	297	0.031322
298	0.031322	299	0.031322	300	0.031322
301	0.031322	302	0.031322	303	0.031322
304	0.031322	305	0.031322	306	0.031322
307	0.031322	308	0.031322	309	0.031322
310	0.031322	311	0.031322	312	0.031322
313	0.031322	314	0.031322	315	0.031322
316	0.031322	317	0.031322	318	0.031322
319	0.031322	320	0.031322	321	0.031322
322	0.031322	323	0.031322	324	0.031322
325	0.031322	326	0.031322	327	0.031322
328	0.031322	329	0.031322	330	0.031322
331	0.031322	332	0.031322	333	0.031322
334	0.031322	335	0.031322	336	0.031322
337	0.031322	338	0.031322	339	0.031322
340	0.031322	341	0.031322	342	0.031322
343	0.031322	344	0.031322	345	0.031322
346	0.031322	347	0.031322	348	0.031322
349	0.031322	350	0.031322	351	0.031322
352	0.031322	353	0.031322	354	0.031322
355	0.031322	356	0.031322	357	0.031322
358	0.031322	359	0.031322	360	0.031322
361	0.031322	362	0.031322	363	0.031322
364	0.031322	365	0.031322	366	0.031322
367	0.031322	368	0.031322	369	0.031322
370	0.031322	371	0.031322	372	0.031322
373	0.031322	374	0.031322	375	0.031322
376	0.031322	377	0.031322	378	0.031322
379	0.031322	380	0.031322	381	0.031322
382	0.031322	383	0.031322	384	0.031322
385	0.031322	386	0.031322	387	0.031322
388	0.031322	389	0.031322	390	0.031322
391	0.031322	392	0.031322	393	0.031322
394	0.031322	395	0.031322	396	0.031322
397	0.031322	398	0.031322	399	0.031322
400	0.031322	401	0.031322	402	0.031322
403	0.031322	404	0.031322	405	0.031322
406	0.031322	407	0.031322	408	0.031322
409	0.031322	410	0.031322	411	0.031322
412	0.031322	413	0.031322	414	0.031322
415	0.031322	416	0.031322	417	0.031322
418	0.031322	419	0.031322	420	0.031322
421	0.031322	422	0.031322	423	0.031322
424	0.031322	425	0.031322	426	0.031322
427	0.031322	428	0.031322	429	0.031322

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
430	0.031322	431	0.031322	432	0.031322
433	0.031322	434	0.031322	435	0.031322
436	0.031322	437	0.031322	438	0.031322
439	0.031322	440	0.031322	441	0.031322
442	0.031322	443	0.031322	444	0.031322
445	0.031322	446	0.031322	447	0.031322
448	0.031322	449	0.031322	450	0.031322
451	0.031322	452	0.031322	453	0.031322
454	0.031322	455	0.031322	456	0.031322
457	0.031322	458	0.031322	459	0.031322
460	0.031322	461	0.031322	462	0.031322
463	0.031322	464	0.031322	465	0.031322
466	0.031322	467	0.031322	468	0.031322
469	0.031322	470	0.031322	471	0.031322
472	0.031322	473	0.031322	474	0.031322
475	0.031322	476	0.031322	477	0.031322
478	0.031322	479	0.031322	480	0.031322
481	0.031322	482	0.031322	483	0.031322
484	0.031322	485	0.031322	486	0.031322
487	0.031322	488	0.031322	489	0.031322
490	0.031322	491	0.031322	492	0.031322
493	0.031322	494	0.031322	495	0.031322
496	0.031322	497	0.031322	498	0.031322
499	0.031322	500	0.031322	501	0.031322
502	0.031322	503	0.031322	504	0.031322
505	0.031322	506	0.031322	507	0.031322
508	0.031322	509	0.031322	510	0.031322
511	0.031322	512	0.031322	513	0.031322
514	0.031322	515	0.031322	516	0.031322
517	0.031322	518	0.031322	519	0.031322
520	0.031322	521	0.031322	522	0.031322
523	0.031322	524	0.031322	525	0.031322
526	0.031322	527	0.031322	528	0.031322
529	0.031322	530	0.031322	531	0.031322
532	0.031322	533	0.031322	534	0.031322
535	0.031322	536	0.031322	537	0.031322
538	0.031322	539	0.031322	540	0.031322
541	0.031322	542	0.031322	543	0.031322
544	0.031322	545	0.031322	546	0.031322
547	0.031322	548	0.031322	549	0.031322
550	0.031322	551	0.031322	552	0.031322
553	0.031322	554	0.031322	555	0.031322
556	0.031322	557	0.031322	558	0.031322
559	0.031322	560	0.031322	561	0.031322
562	0.031322	563	0.031322	564	0.031322
565	0.031322	566	0.031322	567	0.031322
568	0.031322	569	0.031322	570	0.031322
571	0.031322	572	0.031322	573	0.031322
574	0.031322	575	0.031322	576	0.031322
577	0.031322	578	0.031322	579	0.031322
580	0.031322	581	0.031322	582	0.031322
583	0.031322	584	0.031322	585	0.031322

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
586	0.031322	587	0.031322	588	0.031322
589	0.031322	590	0.031322	591	0.031322
592	0.031322	593	0.031322	594	0.031322
595	0.031322	596	0.031322	597	0.031322
598	0.031322	599	0.031322	600	0.031322
601	0.031322	602	0.031322	603	0.031322
604	0.031322	605	0.031322	606	0.031322
607	0.031322	608	0.031322	609	0.031322
610	0.031322	611	0.031322	612	0.031322
613	0.031322	614	0.031322	615	0.031322
616	0.031322	617	0.031322	618	0.031322
619	0.031322	620	0.031322	621	0.031322
622	0.031322	623	0.031322	624	0.031322
625	0.031322	626	0.031322	627	0.031322
628	0.031322	629	0.031322	630	0.031322
631	0.031322	632	0.031322	633	0.031322
634	0.031322	635	0.031322	636	0.031322
637	0.031322	638	0.031322	639	0.031322
640	0.031322	641	0.031322	642	0.031322
643	0.031322	644	0.031322	645	0.031322
646	0.031322	647	0.031322	648	0.031322
649	0.031322	650	0.031322	651	0.031322
652	0.031322	653	0.031322	654	0.031322
655	0.031322	656	0.031322	657	0.031322
658	0.031322	659	0.031322	660	0.031322
661	0.031322	662	0.031322	663	0.031322
664	0.031322	665	0.031322	666	0.031322
667	0.031322	668	0.031322	669	0.031322
670	0.031322	671	0.031322	672	0.031322
673	0.031322	674	0.031322	675	0.031322
676	0.031322	677	0.031322	678	0.031322
679	0.031322	680	0.031322	681	0.031322
682	0.031322	683	0.031322	684	0.031322
685	0.031322	686	0.031322	687	0.031322
688	0.031322	689	0.031322	690	0.031322
691	0.031322	692	0.031322	693	0.031322
694	0.031322	695	0.031322	696	0.031322
697	0.031322	698	0.031322	699	0.031322
700	0.031322	701	0.031322	702	0.031322
703	0.031322	704	0.031322	705	0.031322
706	0.031322	707	0.031322	708	0.031322
709	0.031322	710	0.031322	711	0.031322
712	0.031322	713	0.031322	714	0.031322
715	0.031322	716	0.031322	717	0.031322
718	0.031322	719	0.031322	720	0.031322
721	0.031322	722	0.031322	723	0.031322
724	0.031322	725	0.031322	726	0.031322
727	0.031322	728	0.031322	729	0.031322
730	0.031322	731	0.031322	732	0.031322
733	0.031322	734	0.031322	735	0.031322
736	0.031322	737	0.031322	738	0.031322
739	0.031322	740	0.031322	741	0.031322

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Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
742	0.031322	743	0.031322	744	0.031322
745	0.031322	746	0.031322	747	0.031322
748	0.031322	749	0.031322	750	0.031322
751	0.031322	752	0.031322	753	0.031322
754	0.031322	755	0.031322	756	0.031322
757	0.031322	758	0.031322	759	0.031322
760	0.031322	761	0.031322	762	0.031322
763	0.031322	764	0.031322	765	0.031322
766	0.031322	767	0.031322	768	0.031322
769	0.031322	770	0.031322	771	0.031322
772	0.031322	773	0.031322	774	0.031322
775	0.031322	776	0.031322	777	0.031322
778	0.031322	779	0.031322	780	0.031322
781	0.031322	782	0.031322	783	0.031322
784	0.031322	785	0.031322	786	0.031322
787	0.031322	788	0.031322	789	0.031322
790	0.031322	791	0.031322	792	0.031322
793	0.031322	794	0.031322	795	0.031322
796	0.031322	797	0.031322	798	0.031322
799	0.031322	800	0.031322	801	0.031322
802	0.031322	803	0.031322	804	0.031322
805	0.031322	806	0.031322	807	0.031322
808	0.031322	809	0.031322	810	0.031322
811	0.031322	812	0.031322	813	0.031322
814	0.031322	815	0.031322	816	0.031322
817	0.031322	818	0.031322	819	0.031322
820	0.031322	821	0.031322	822	0.031322
823	0.031322	824	0.031322	825	0.031322
826	0.031322	827	0.031322	828	0.031322
829	0.031322	830	0.031322	831	0.031322
832	0.031322	833	0.031322	834	0.031322
835	0.031322	836	0.031322	837	0.031322
838	0.031322	839	0.031322	840	0.031322
841	0.031322	842	0.031322	843	0.031322
844	0.031322	845	0.031322	846	0.031322
847	0.031322	848	0.031322	849	0.031322
850	0.031322	851	0.031322	852	0.031322
853	0.031322	854	0.031322	855	0.031322
856	0.031322	857	0.031322	858	0.031322
859	0.031322	860	0.031322	861	0.031322
862	0.031322	863	0.031322	864	0.031322
865	0.031322	866	0.031322	867	0.031322
868	0.031322	869	0.031322	870	0.031322
871	0.031322	872	0.031322	873	0.031322
874	0.031322	875	0.031322	876	0.031322
877	0.031322	878	0.031322	879	0.031322
880	0.031322	881	0.031322	882	0.031322
883	0.031322	884	0.031322	885	0.031322
886	0.031322	887	0.031322	888	0.031322
889	0.031322	890	0.031322	891	0.031322
892	0.031322	893	0.031322	894	0.031322
895	0.031322	896	0.031322	897	0.031322

Continua na próxima página

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
898	0.031322	899	0.031322	900	0.031322
901	0.031322	902	0.031322	903	0.031322
904	0.031322	905	0.031322	906	0.031322
907	0.031322	908	0.031322	909	0.031322
910	0.031322	911	0.031322	912	0.031322
913	0.031322	914	0.031322	915	0.031322
916	0.031322	917	0.031322	918	0.031322
919	0.031322	920	0.031322	921	0.031322
922	0.031322	923	0.031322	924	0.031322
925	0.031322	926	0.031322	927	0.031322
928	0.031322	929	0.031322	930	0.031322
931	0.031322	932	0.031322	933	0.031322
934	0.031322	935	0.031322	936	0.031322
937	0.031322	938	0.031322	939	0.031322
940	0.031322	941	0.031322	942	0.031322
943	0.031322	944	0.031322	945	0.031322
946	0.031322	947	0.031322	948	0.031322
949	0.031322	950	0.031322	951	0.031322
952	0.031322	953	0.031322	954	0.031322
955	0.031322	956	0.031322	957	0.031322
958	0.031322	959	0.031322	960	0.031322
961	0.031322	962	0.031322	963	0.031322
964	0.031322	965	0.031322	966	0.031322
967	0.031322	968	0.031322	969	0.031322
970	0.031322	971	0.031322	972	0.031322
973	0.031322	974	0.031322	975	0.031322
976	0.031322	977	0.031322	978	0.031322
979	0.031322	980	0.031322	981	0.031322
982	0.031322	983	0.031322	984	0.031322
985	0.031322	986	0.031322	987	0.031322
988	0.031322	989	0.031322	990	0.031322
991	0.031322	992	0.031322	993	0.031322
994	0.031322	995	0.031322	996	0.031322
997	0.031322	998	0.031322	999	0.031322
1000	0.000000				

2.15 Problema: LINEAR MINIMUM SURFACE

Informações:

- Número de variáveis: 64
- Iterações: 1
- Valor mínimo: 1.267555e+00
- Tempo de execução: 0.016s

Tabela 16: Valores das variáveis do problema LINEAR MINIMUM SURFACE

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.023654	2	0.050706	3	0.077753
4	0.104810	5	0.131866	6	0.158923
7	0.186000	8	0.213046	9	0.037200
10	0.000060	11	0.000032	12	0.000033
13	0.000033	14	0.000033	15	0.000056
16	0.226577	17	0.050697	18	0.000033
19	0.000000	20	0.000000	21	0.000000
22	0.000000	23	0.000034	24	0.240093
25	0.064225	26	0.000033	27	0.000000
28	0.000000	29	0.000000	30	0.000000
31	0.000034	32	0.253621	33	0.077753
34	0.000033	35	0.000000	36	0.000000
37	0.000000	38	0.000000	39	0.000034
40	0.267149	41	0.091282	42	0.000034
43	0.000000	44	0.000000	45	0.000000
46	0.000000	47	0.000034	48	0.280677
49	0.104834	50	0.000057	51	0.000034
52	0.000034	53	0.000034	54	0.000034
55	0.000056	56	0.294221	57	0.118350
58	0.145405	59	0.172451	60	0.199508
61	0.226564	62	0.253621	63	0.280694
64	0.307744				

2.16 Problema: ULTS0

Informações:

- Número de variáveis: 64
- Iterações: 6
- Valor mínimo: 1.757738e+04
- Tempo de execução: 0.056s

Tabela 17: Valores das variáveis do problema ULTS0

Coordenada	Valor	Coordenada	Valor	Coordenada	Valor
1	0.046146	2	0.012133	3	-0.005613
4	0.111294	5	-0.025570	6	-0.044894
7	0.111543	8	0.047219	9	-0.043437
10	0.050457	11	0.026145	12	-0.030866
13	0.016656	14	-0.148515	15	-0.039166
16	-0.107185	17	-0.075023	18	0.000439
19	-0.083711	20	-0.135697	21	0.136397
22	-0.027870	23	-0.017129	24	-0.127491
25	-0.051923	26	0.011260	27	-0.114667
28	0.033816	29	-0.061004	30	-0.039013
31	-0.024841	32	0.156736	33	-0.008702
34	-0.099045	35	0.080868	36	-0.123721
37	0.019438	38	-0.165030	39	-0.082082
40	0.007335	41	0.063188	42	0.013477
43	-0.010267	44	-0.032436	45	-0.135974
46	-0.073876	47	-0.036257	48	0.098330
49	0.054912	50	-0.078276	51	0.028658
52	-0.011435	53	-0.064576	54	0.026223
55	0.022580	56	0.050653	57	-0.168691
58	-0.037035	59	0.021057	60	0.073906
61	-0.043782	62	-0.007503	63	-0.107007
64	-0.056222				