Instance	Source	Prim-DFS	Prim-BFS	Kruskal-DFS	Kruskal-BFS	Optimal
bayg29	0	2283	3583	2119	3282	1610
bayg29	1	2326	3545	2143	3201	1610
bayg29	2	2318	3598	2083	2982	1610
bayg29	3	2059	3605	2143	4464	1610
bayg29	4	2269	3537	2159	3150	1610
bayg29	5	2454		2083	4011	1610
bayg29	6	2521	3272	2235	3414	1610
bayg29	7	2273	3248	2130	3369	1610
bayg29	8	2397	3221	2143	3199	1610
bayg29	9	2321	4361	2164	2650	
bayg29	10	2077	3453	2126	3440	1610
bayg29	11	2281	3671	2130	4395	1610
bayg29	12	2442	4359	2260	2940	1610
bayg29	13	2151	3368	2170	3374	1610
bayg29	14	2009	3815	2129	4328	1610
bayg29	15	2244	3967	2260	3161	1610
bayg29 bayg29	16		4310	2151	3487	1610
bayg29	17	2381	3990	2179	2540	1610
bayg29 bayg29	18		4058	2145	3027	1610
bayg29 bayg29	19	2618	4311	2139	3258	1610
payg29	20	2746		2189	3542	1610
payg29	21	2320	4481	2179	4385	1610
payg29	22	2567	3793	2224	3863	1610
payg29	23		3977	2177	3053	1610
payg29 payg29	24	2606	3893	2177	2573	1610
payg29 payg29	25	2000		2119	2802	1610
	26	2196		2119	3345	1610
bayg29	27	2329	3478	2177	3337	1610
payg29	28			2080	2579	1610
payg29		2816				
bays29	0	2725	4495 4559	2600 2456	3746	2020 2020
bays29	1				3350 4636	
bays29	2	2765		2437	4636	2020
bays29	3		4565 4315	2456	5276 2271	2020
bays29	4	3108		2440	3271	2020
bays29	5	3062	4657	2437	3888	2020
bays29	6			2554	3903	2020
bays29	7	2873	4208	2425	3721	2020
bays29	8		4028	2419	3793	2020
bays29	9	2964		2587	3539	2020
bays29	10	2555	4353	2612	3934	2020
bays29	11	2764		2425	4392	2020
bays29	12	3048	5396	2534	3692	2020
bays29	13			2529	3721	2020
bays29	14	2879	4995	2458	4403	2020
bays29	15	2769	4971	2534	3348	2020
bays29	16	3349		2635	3658	2020
bays29	17	3350	5137	2601	3830	2020
bays29	18			2629	3374	2020
bays29	19	3263	4938	2635	3438	2020

bays29	20	3083	5275	2609	3853	2020
bays29	21	2791	5158	2601	4749	2020
bays29	22	2897	4107	2487	5340	2020
bays29	23	2603	5487	2396	3368	2020
bays29	24	3280	5263	2609	3654	2020
bays29	25	2565	5115	2600	3570	2020
bays29	26	2931	4900	2661	3888	2020
bays29	27	2925	4243	2587	3504	2020
bays29	28	2815	4543	2406	3622	2020
brazil58	0	36639	70066	29729	85678	25395
brazil58	1	36639	69659	29946	57583	25395
brazil58	2	37322	63836	29814	53253	25395
brazil58	3	43125	73659	30047	122477	25395
brazil58	4	36581	66824	29715	70738	25395
brazil58	5	37947	72981	30167	83895	25395
brazil58	6	35026	60413	29923	64531	25395
brazil58	7	39718	64432	30249	59828	25395
brazil58	8	31112	84474	30461	62674	25395
brazil58	9	40235	67328	30035	86316	25395
brazil58	10	36336	75702	29467	55448	25395
brazil58	11	33359	70979	29031	87973	25395
brazil58	12	33970	74603	30824	74671	25395
brazil58	13	31821	80728	29113	56303	25395
brazil58	14	32365	97984	29520	93985	25395
brazil58	15	36626	77908	29619	54816	25395
brazil58	16	35934	87279	29736	114525	25395
brazil58	17	43520	77533	30047	119011	25395
brazil58	18	34459	63730	29729	79102	25395
brazil58	19	35694	76373	29844	59565	25395
brazil58	20	38416	65011	30158	59828	25395
brazil58	21	39797	71474	30769	104147	25395
brazil58	22	40474	83412	30035	55266	25395
brazil58	23	34126	71112	29036	84203	25395
brazil58	24	33002	73592	29954	63509	25395
brazil58	25	34675	80262	29623	55273	25395
brazil58	26	35217	65358	30692	92562	25395
brazil58	27	37595	77486	29493	92786	25395
brazil58	28	34978	61641	30055	77188	25395
brazil58	29	40806	86850	30037	53742	25395
brazil58	30	37126	73438	29715	64445	25395
brazil58	31	40239	101763	30066	103408	25395
brazil58	32	34381	80077	30359	67521	25395
brazil58	33	36064	73010	30614	89221	25395
brazil58	34	38631	80241	30741	55002	25395
brazil58	35	35983	79497	30131	55156	25395
brazil58	36	38867	80937	30255	75274	25395
brazil58	37	36475	65031	30052	73893	25395
brazil58	38	35252	68891	30609	61321	25395
brazil58	39	36053	69703	29919	88306	25395
brazil58	40	34778	78659	29954	90608	25395

brazil58	41	40705	64770	29619	59758	25395
brazil58	42	36458	64682	29031	64375	25395
brazil58	43	39688	95800	30158	61877	25395
brazil58	44	34615	61949	30598	70996	25395
brazil58	45	36160	78328	29710	107764	25395
brazil58	46	34549	58949	30560	84173	25395
brazil58	47	35861	95469	29738	114203	25395
brazil58	48	35959	76455	29036	64531	25395
brazil58	49	34984	100832	29467	101175	25395
brazil58	50	36511	82040	29493	59765	25395
brazil58	51	36905	79996	29844	63259	25395
brazil58	52	36112	101225	29946	101080	25395
brazil58	53	36857	68881	29919	54149	25395
brazil58	54	34797	64500	30609	60609	25395
brazil58	55	39056	99963	29959	114508	25395
brazil58	56	37355	87911	30066	102506	25395
brazil58	57	36476	60833	29623	88355	25395
brg180	0	207830	277130	203240	1035390	1950
brg180	1	114040	321860	188750	1036860	1950
brg180	2	16280	271510	197700	1037330	1950
brg180	3	114470	299570	197700	1047860	1950
brg180	4	180070	320190	199820	1062760	1950
brg180	5	158090	251480	208730	1084630	1950
brg180	6	198030	254980	207710	931930	1950
brg180	7	154310	224250	208730	1020420	1950
brg180	8	124240	335040	197710	1047910	1950
brg180	9	182980	208280	208730	1034410	1950
brg180	10	162350	300390	208730	1113680	1950
brg180	11	155540	272030	197750	995870	1950
brg180	12	135520	367800	208730	941910	1950
brg180	13	157160	250450	208730	1019510	1950
brg180	14	223830	257100	197740	1060830	1950
brg180	15	199980	230510	208730	1112620	1950
brg180	16	152540	291390	191200	1053360	1950
brg180	17	199570	283160	193280	1104770	1950
brg180	18	104440	283950	196680	951910	1950
brg180	19	158540	281690	196680	1080910	1950
brg180	20	123810	283890	196680	1065200	1950
brg180	21	152350	288890	207710	1054360	1950
brg180	22	169540	294360	197750	1019180	1950
brg180	23	132280	336920	201180	1045830	1950
brg180	24	121900	263070	201180	952910	1950
brg180	25	147380	294010	199820	1057360	1950
brg180	26	139820	280450	201180	1084320	1950
brg180	27	152310	274390	201180	1043830	1950
brg180	28	174520	310890	196680	1111620	1950
brg180	29	133370	345450	211180	1007210	1950
brg180	30	142470	221950	198760	990440	1950
brg180	31	171940	284070	187740	963440	1950
brg180	32	113320	382800	211180	1063860	1950

brg180	33	166770	245280	198780	1044420	1950
brg180	34	199590	316890	187750	1020420	1950
brg180	35	125740	290420	211180	1073770	1950
brg180	36	104840	301860	208740	1054230	1950
brg180	37	154300	323740	211180	1094610	1950
brg180	38	113910	203510	199820	969940	1950
brg180	39	122080	278010	191200	1073800	1950
brg180	40	123490	236530	202180	940360	1950
brg180	41	219590	296920	196680	1010930	1950
brg180	42	131430	291510	212180	1025850	1950
brg180	43	147220	213540	212180	989880	1950
brg180	44	121950	318480	187750	1029480	1950
brg180	45	146290	244360	212180	1051420	1950
brg180	46	161160	354970	208740	1043890	1950
brg180	47	184420	327300	212180	964390	1950
brg180	48	162900	277160	183280	986410	1950
brg180	49	174570	230480	206710	1099820	1950
brg180	50	121960	336270	190180	1044670	1950
brg180	51	202980	311860	212180	1041890	1950
brg180	52	209480	310420	212180	1022890	1950
brg180	53	165080	321480	196680	974370	1950
brg180	54	211020	263570	212180	956430	1950
brg180	55	178280	285040	212180	1029890	1950
brg180	56	157470	283890	187790	985180	1950
brg180	57	175240	249190	202180	980460	1950
brg180	58	99560	292450	202180	1090680	1950
brg180	59	165540	267570	183300	1004350	1950
brg180	60	164530	290950	197710	1008950	1950
brg180	61	135410	275060	202180	1006510	1950
brg180	62	172870	310070	207710	1055890	1950
brg180	63	169760	270420	199820	1019830	1950
brg180	64	153020	290130	206680	1057290	1950
brg180	65	137380	270830	189820	1124590	1950
brg180	66	151560	276510	189820	1046740	1950
brg180	67	161060	339600	187790	952970	1950
brg180	68	155890	286010	197740	1042270	1950
brg180	69	154390	276010	197740	1026830	1950
brg180	70	153150	309300	197710	1051770	1950
brg180	71	168330	271540	201180	1016860	1950
brg180	72	130030	282540	187740	1029770	1950
brg180	73	119210	263510	208790	1049810	1950
brg180	74	125850	275980	206680	1039800	1950
brg180	75	164830	349420	212180	1015410	1950
brg180	76	189180	276540	207710	956780	1950
brg180	77	53530	336450	212210	1035830	1950
brg180	78	158010	295890	197750	968450	1950
brg180	79	142590	261660	199820	966760	1950
brg180	80	129880	256510	197740	1094230	1950
brg180	81	141690	303100	197710	986760	1950
brg180	82	162880	274480	197740	1036330	1950
. ~	1		1	- 1	1	1

brg180	83	150570	263600	213210	965270	1950
brg180	84	141830	311950	197710	973210	1950
brg180	85	161880	241600	206710	1059790	1950
brg180	86	198670	311830	208740	969740	1950
brg180	87	143950	311830	197740	949760	1950
brg180	88	163870	296920	193280	998430	1950
brg180	89	174410	301450	200180	934280	1950
brg180	90	171140	304060	198760	1073290	1950
brg180	91	127430	310480	187770	915420	1950
brg180	92	137200	301980	197710	1094150	1950
brg180	93	170140	237160	198760	1036300	1950
brg180	94	133730	301890	207710	1036360	1950
brg180	95	137210	267570	207710	925400	1950
brg180	96	181590	316000	201210	955380	1950
brg180	97	120950	268160	197710	1067770	1950
brg180	98	131690	275950	207710	969850	1950
brg180	99	111580	279420	207710	964380	1950
brg180	100	165850	269570	183300	1002910	1950
brg180	101	192890	280510	200180	967850	1950
brg180	102	131020	262570	213210	949330	1950
brg180	103	109730	296980	198740	973970	1950
brg180	104	136460	284510	213210	983540	1950
brg180	105	165840	234630	193280	988650	1950
brg180	106	138330	273510	198760	976080	1950
brg180	107	170270	235160	213210	1061270	1950
brg180	108	182510	280690	208740	986060	1950
brg180	109	150500	280660	197730	1006040	1950
brg180	110	116990	296510	197710	1022890	1950
brg180	111	162500	299970	198760	1029390	1950
brg180	112	128130	296070	198760	1023980	1950
brg180	113	130700	290540	200180	1033980	1950
brg180	114	131000	321510	208730	983950	1950
brg180	115	175430	266070	208710	1054920	1950
brg180	116	145370	274660	198760	1043480	1950
brg180	117	132930	272630	197710	1036860	1950
brg180	118	123630	290630	197740	1043480	1950
brg180	119	179380	304070	201210	1033480	1950
brg180	120	144110	317920	205680	1071390	1950
brg180	121	160170	257630	198760	1023500	1950
brg180	122	171440	268570	200180	993520	1950
brg180	123	164320	303570	207710	1013930	1950
brg180	124	138480	311040	203240	1104770	1950
brg180	125	136970	311540	205680	1103770	1950
brg180	126	129820	266950	206680	1033840	1950
brg180	127	127110	319070	188760	1061420	1950
brg180	128	141950	266540	183280	1035390	1950
brg180	129	158160	272010	200180	1086800	1950
brg180	130	170460	250040	208740	1075180	1950
brg180	131	127800	276510	193280	1065890	1950
brg180	132	150350		200180	1091710	1950
. ~		1	1	1	- 1	1

brg180	133	108300	261890	201210	1054650	1950
brg180	134	178310	256570	187770	1036940	1950
brg180	135	113620	279860	188760	1023910	1950
brg180	136	147160	239010	200180	1093120	1950
brg180	137	158330	204570	201180	1093120	1950
brg180	138	193220	262480	198740	1023860	1950
brg180	139	143480	68120	193280	1061770	1950
brg180	140	169870	260690	188760	1090290	1950
brg180	141	160580	208510	181230	1077240	1950
brg180	142	165400	236600	208760	1094770	1950
brg180	143	110370	245780	200180	1131180	1950
brg180	144	161800	221010	196680	1044390	1950
brg180	145	139600	231100	188760	994860	1950
brg180	146	137280	267410	197710	1043890	1950
brg180	147	130430	296850	197740	1046360	1950
brg180	148	106840	248190	200180	1048890	1950
brg180	149	132520	264980	196680	1057860	1950
brg180	150	130420	274980	193280	993880	1950
brg180	151	126550	246060	198760	1011450	1950
brg180	152	145480	281980	198760	1000270	1950
brg180	153	146840	285890	207710	1030830	1950
brg180 brg180	154	189470	296570	207710	1030830	1950
brg180	154	151580	253500	191180	1026960	1950
-				191180	981770	1950
brg180	156	148980	250690		981770	1950
brg180	157	153230	236130	203240		
brg180	158	125220	259570	198790	946450	1950
brg180	159	144000	221160	208720	979730	1950
brg180	160	166400	248070	191180	1067470	1950
brg180	161	148400	218130	207710	960240	1950
brg180	162	131060	245010	184270	992870	1950
brg180	163	155870	264510	197750	970220	1950
brg180	164	111780	271540	208790	1000200	1950
brg180	165	153630	216630	190180	1130090	1950
brg180	166	171460	259650	201180	1044830	1950
brg180	167	161580	293980	198740	1010180	1950
brg180	168	144500	271380	198780	1020180	1950
brg180	169	140020	246630	197750	916470	1950
brg180	170	136390	236750	181230	1063820	1950
brg180	171	105620	312920	208760	1030360	1950
brg180	172	181520	253980	206650	1040830	1950
brg180	173	161450	278360	197710	1040830	1950
brg180	174	169310	258980	197750	1053810	1950
brg180	175	119370	242070	206650	1016740	1950
brg180	176	180760	278630	197740	1060310	1950
brg180	177	110280	270040	199820	1036700	1950
brg180	178	137750	220270	200180	1046680	1950
brg180	179	186280	242010	197710	900990	1950
dantzig42	0	948	2739	981	2417	699
dantzig42	1	1104	2401	947	1754	699
dantzig42	2	953	2145	984	1542	699

dont-:-42	اد	٥٥٠١	2224	070	1517	cool	
dantzig42	3	985 1025	2334 2034	978 916	1517 1953	699 699	
dantzig42	4			978			
dantzig42	5	1013	2500		1597	699	
dantzig42	6	978	2329	915	1632	699	
dantzig42	7	993	2249	915	1648	699	
dantzig42	8	1154	2390	947	1754	699	
dantzig42	9	1130	2610	948	1744	699	
dantzig42	10	1107	2763	942	2479	699	
dantzig42	11	974	2007	971	2419	699	
dantzig42	12	1076	2091	943	1881	699	
dantzig42	13	1033	2015	971	2102	699	
dantzig42	14	1035	2401	951	2614	699	
dantzig42	15	1091	2469	910	1641	699	
dantzig42	16	1039	2359	955	2623	699	
dantzig42	17	1018	2537	955	2615	699	
dantzig42	18	995	2196	969	2615	699	
dantzig42	19	986	2205	970	2584	699	
dantzig42	20	1037	2176	971	1857	699	
dantzig42	21	947	2137	990	2079	699	
dantzig42	22	938	2441	959	2060	699	
dantzig42	23	1004	2309	910	1848	699	
dantzig42	24	1007	2703	959	1829	699	
dantzig42	25	964	2553	1008	1528	699	
dantzig42	26	1111	2756	1031	1528	699	
dantzig42	27	1043	2316	1031	1588	699	
dantzig42	28	1076	1830	979	1854	699	
dantzig42	29	1079	2091	1032	1802	699	
dantzig42	30	1038	2101	995	1571	699	
dantzig42	31	1030	1927	929	1897	699	
dantzig42	32	1097	2299	1032	1484	699	
dantzig42	33	1058	2512	958	1442	699	
dantzig42	34	1006	2249	958	1769	699	
dantzig42	35	1025	2200	938	1793	699	
dantzig42	36	1060	2762	951	1803	699	
dantzig42	37	1018	2120	979	1860	699	
dantzig42	38	920	2153	979	2449	699	
dantzig42	39	1092	2754	943	1944	699	
dantzig42	40	928	2636	984	2568	699	
dantzig42	41	884	2575	980	2413	699	
fri26	0	1176	1505	1139	1751	937	
fri26	1	1550	1606	1190	1790	937	
fri26	2	1357	1630	1220	1843	937	
fri26	3	1363	1823	1223	1743	937	
fri26	4	1501	1865	1168	1739	937	
fri26	5	1494	1784	1177	1752	937	
fri26	6	1488	1834	1177	1829	937	
fri26	7	1459	2113	1158	1805	937	
fri26	8	1545	2029	1158	1835	937	
fri26	9	1470	1983	1211	1683	937	
fri26	10	1439	1671	1208	1705	937	

fri26	11	1367	1825	1207	1648	937
fri26	12	1310	1722	1179	1682	937
fri26	13	1383	1735	1179	1821	937
fri26	14	1465	1697	1208	1816	937
fri26	15	1312	2013	1203	2049	937
fri26	16	1502	2294	1207	1916	937
fri26	17	1468	2443	1184	2134	937
fri26	18	1425	2506	1222	2259	937
fri26	19	1423	2450	1235	2281	937
fri26	20	1470	2176	1222	1833	937
fri26	21	1394	2367	1133	1658	937
fri26	22	1417	2450	1125	1588	937
fri26	23	1419	2531	1125	1480	937
fri26	24	1496	1426	1131	1529	937
fri26	25	1398	2416	1075	1684	937
gr120	0	11843	28382	9899	24163	6942
gr120	1	11702	27929	9830	19889	6942
gr120	2	12064	27330	9882	21272	6942
gr120	3	11362	28051	9936	30711	6942
gr120	4	11235	24700	9877	21397	6942
gr120	5	11417	25316	9963	21222	6942
gr120	6	10980	25128	9796	20765	6942
gr120	7	11494	30544	9877	26827	6942
gr120	8	13046	31119	9776	32334	6942
gr120	9	11702	26371	9991	21646	6942
gr120	10	11543	28007	9865	26190	6942
gr120	11	12423	30560	9867	34950	6942
gr120	12	11334	27495	9964	34848	6942
gr120	13	11105	25910	9889	20989	6942
gr120	14	12040	29960	9813	21871	6942
gr120	15	11134	34889	9859	30661	6942
gr120	16	12377	25475	9964	21276	6942
gr120	17	12410	28723	9877	20801	6942
gr120	18	12257	26904	9759	25870	6942
gr120	19	10308	29997	9768	23444	6942
gr120	20	11824	27470	9958	21266	6942
gr120	21	11010	26540	9907	35326	6942
gr120	22	11410	30269	9777	20337	6942
gr120	23	12421	28491	9846	25560	6942
gr120	24	12637	31292	9936	20372	6942
gr120	25	11564	31771	9846	20021	6942
gr120	26	11499	26201	9891	21266	6942
gr120	27	12090	28421	9882	20629	6942
gr120	28	12238	26144	9817	20957	6942
gr120	29	10903	29785	9907	24248	6942
gr120	30	10772	31743	9768	33795	6942
gr120	31	11247	27669	9873	37583	6942
gr120	32	11702	27683	9776	21029	6942
gr120	33	11417	28744	9737	34975	6942
gr120	34	12201	28745	9817	25872	6942

gr120	35	11622	30593	9706	25785	6942
gr120 gr120	36	11638	26236	9837	20149	6942
gr120	37	13108	31835	9778	21293	6942
gr120	38	11396	26535	9939	21205	6942
gr120	39	11625	29105	9893	26217	6942
gr120	40	11414	31931	9991	20344	6942
gr120	41	10652	27606	9938	36006	6942
gr120	42	11101	29311	9667	25717	6942
gr120	43	11087	29206	9964	19684	6942
gr120	44	12034	28481	9858	29744	6942
gr120	45	12476	23950	9891	20588	6942
gr120	46	13193	27598	9759	29458	6942
gr120	47	11307	28125	9770	34975	6942
gr120	48	11210	28716	10001	33861	6942
gr120	49	10628	25680	9930	23794	6942
gr120	50	11371	29143	9896	25961	6942
gr120	51	11030	28814	9883	31521	6942
gr120	52	11597	32022	9754	19707	6942
gr120	53	10936	31158	9817	30668	6942
gr120	54	11327	27656	9942	25560	6942
gr120	55	11356	27060	9923	25855	6942
gr120	56	11958	32727	9715	23833	6942
gr120	57	12393	26349	9899	20710	6942
gr120	58	11770	31612	9683	23370	6942
gr120	59	11242	24417	9822	21456	6942
gr120	60	12356	30606	9945	30361	6942
gr120	61	11558	28822	9953	23845	6942
gr120	62	11750	27376	9931	20932	6942
gr120	63	11409	27359	9796	19943	6942
gr120	64	10880	28217	9883	20605	6942
gr120	65	11040	29773	9930	21808	6942
gr120	66	10751	29426	9861	27715	6942
gr120	67	11012	30344	9670	21101	6942
gr120	68	11022	27931	9841	27921	6942
gr120	69	11537	26893	9796	23663	6942
gr120	70	11677	28955	9667	20040	6942
gr120	71	11862	29042	9942	20770	6942
gr120	72	11678	28293	9942	20975	6942
gr120	73	12030	27671	9776	20335	6942
gr120	74	11810	28831	9968	19696	6942
gr120	75	11819	26340	9942	20579	6942
gr120	76	11672	25973	9891	35078	6942
gr120	77	11121	29985	9916	30350	6942
gr120	78	10813	28352	9611	25810	6942
gr120	79	11438	29330	9899	23845	6942
gr120	80	12264	23849	9942	21191	6942
gr120	81	12149	28565	9777	19934	6942
gr120	82	11300	30840	9683	33795	6942
gr120	83	10719	31401	9833	35994	6942
gr120	84	11168	27282	9748	24111	6942

ar120	85	11820	27039	9889	36535	6942
gr120 gr120	86	12070	24805	10027	20431	6942
_	87	11106	23589	9882	21470	6942
gr120 gr120	88	12636	24664	9930	21470	6942
gr120 gr120	89	10967	27762	9956	21336	6942
_	90	12008	29354	9754	25943	6942
gr120	90	12008	25581	9966	23943	6942
gr120	92	10446	26429	9782	20751	6942
gr120 gr120	93	13407	27650	9821	20751	6942
_	93	12635	27630	9778	20300	6942
gr120 gr120	95	11953	27493	9791	33060	6942
_	96	11431	30036	9899	28622	6942
gr120	97	12187	26286	9966	30341	6942
gr120				9853	20615	6942
gr120	98	11538	30663			
gr120	99	12038	23265	9966	21571	6942
gr120	100	11132	28205	9611	24139	6942
gr120	101	12299	31350	9849	22751	6942
gr120	102	11482	27751	9660	34994	6942
gr120	103	11340	23978	9899	21390	6942
gr120	104	11698	29264	9953	27256	6942
gr120	105	11138	25513	9780	21296	6942
gr120	106	12394	27171	9930	20275	6942
gr120	107	11226	26926	9794	22654	6942
gr120	108	10960	28283	9670	26827	6942
gr120	109	11879	28770	9821	21384	6942
gr120	110	12160	24711	9863	21182	6942
gr120	111	11137	27373	10001	25834	6942
gr120	112	12909	29771	9945	24202	6942
gr120	113	12343	29833	9849	26087	6942
gr120	114	11688	28428	9973	25976	6942
gr120	115	10994	30249	9865	24182	6942
gr120	116	11552	26684	9923	21279	6942
gr120	117	11744	27208	9938	25341	6942
gr120	118	12797	27020	9803	34813	6942
gr120	119	11720	26901	9939	34703	6942
gr17	0	2388	3233	2419	3465	2085
gr17	1	2224	4804	2419	4080	2085
gr17	2	2500	4119	2518	2590	2085
gr17	3	3035	4284	2428	2433	2085
gr17	4	2464	5236	2518	4598	2085
gr17	5	2836	4412	2428	4137	2085
gr17	6	2318	4280	2472	4736	2085
gr17	7	2393	5019	2415	4698	2085
gr17	8	2999	4353	2300	2955	2085
gr17	9	2445	4889	2518	4674	2085
gr17	10	2460	4747	2478	3679	2085
gr17	11	2412	4558	2491	3708	2085
gr17	12	2340	4668	2340	2963	2085
gr17	13	2405	4070	2480	2586	2085
gr17	14	2479	4296	2340	2433	2085

gr17	15	3236	4486	2300	3670	2085
gr17	16	2421	4343	2340	2650	2085
gr21	0	4661	6188	3664	6132	2707
gr21	1	4761	6506	3698	5218	2707
gr21	2	3669	5941	3719	5276	2707
gr21	3	3849	6666	3804	5875	2707
gr21	4	4647	6427	3859	4905	2707
gr21	5	4756	7799	3682	6665	2707
gr21	6	3829	7685	3802	5977	2707
gr21	7	3947	7281	3783	5598	2707
gr21	8	4157	5659	3680	5641	2707
gr21	9	4099	6571	3800	6408	2707
gr21	10	4449	6989	3854	5838	2707
gr21	11	3847	7133	3757	6298	2707
gr21	12	3873	6632	3682	5122	2707
gr21	13	4364	7580	3800	5920	2707
gr21	14	4209	7201	3859	6688	2707
gr21	15	3988	7125	3752	5873	2707
gr21	16	4448	5900	3802	5007	2707
gr21	17	3877	7266	3759	4887	2707
gr21	18	3804	6397	3759	5448	2707
gr21	19	4248	6916	3843	3701	2707
gr21	20	4253	6941	3756	4281	2707
gr24	0	2033	3644	1653	3057	1272
gr24	1	2083	2886	1563	2665	1272
gr24	2	2101	2857	1646	3084	1272
gr24	3	1921	2634	1649	3121	1272
gr24	4	1833	3503	1718	3564	1272
gr24	5	1780	2954	1646	3221	1272
gr24	6	1977	2916	1624	3224	1272
gr24	7	2016	3302	1747	3314	1272
gr24	8	2153	3020	1754	2626	1272
gr24	9	2022	3283	1768	3419	1272
gr24	10	2199	2823	1646	3084	1272
gr24	11	1978	2502	1649	3114	1272
gr24	12	1948	3344	1754	2652	1272
gr24	13	2067	3449	1741	3506	1272
gr24	14	2123	2880	1563	2691	1272
gr24	15	1904	2505	1653	3137	1272
gr24	16	2265	3126	1768	3082	1272
gr24	17	1970	3135	1740	2957	1272
gr24	18	2259	3494	1714	2938	1272
gr24	19	2167	3556	1638	2637	1272
gr24	20	2038	2450	1718	3193	1272
gr24	21	2125	3226	1768	2957	1272
gr24	22	2051	3213	1871	3061	1272
gr24	23	1965	2645	1580	3159	1272
gr48	0	9276	15113	6797	18856	5046
gr48	1	8817	15438	6799	15182	5046
gr48	2	8404	17579	6889	18340	5046

1	ا ما			اممما		
gr48	3	7616	15718	6888	14932	5046
gr48	4	6945	15829	6799	13741	5046
gr48	5	8323	13211	6764	12589	5046
gr48	6	7808	15857	6792	18346	5046
gr48	7	8475	17484	6757	13505	5046
gr48	8	8233	14102	6888	14191	5046
gr48	9	8492	14406	6712	14865	5046
gr48	10	8515	15340	6823	17060	5046
gr48	11	8530	15933	6762	14644	5046
gr48	12	8226	16640	6536	13531	5046
gr48	13	8154	15460	6895	17260	5046
gr48	14	8524	16033	6542	14613	5046
gr48	15	8869	15502	6859	19001	5046
gr48	16	7743	15816	6848	17477	5046
gr48	17	8323	16382	6859	13675	5046
gr48	18	8876	15976	6889	14172	5046
gr48	19	8098	14508	6830	14926	5046
gr48	20	9314	17997	6808	12151	5046
gr48	21	8711	14933	6800	15882	5046
gr48	22	8569	14688	6698	17648	5046
gr48	23	8657	16065	6835	12189	5046
gr48	24	8628	14106	6882	16386	5046
gr48	25	8243	15021	6698	13780	5046
gr48	26	8692	15291	6767	14013	5046
gr48	27	9046	15892	6895	17766	5046
gr48	28	8624	16133	6800	18266	5046
gr48	29	8793	15742	6764	15905	5046
gr48	30	7898	15778	6886	13154	5046
gr48	31	9112	14334	6943	17143	5046
gr48	32	8052	14295	6799	18859	5046
gr48	33	8017	13392	6796	14644	5046
gr48	34	7669	15766	6890	16396	5046
gr48	35	8322	17592	6712	15235	5046
gr48	36	8862	15554	6589	13859	5046
gr48	37	8476	14842	6542	13692	5046
gr48	38	8407	13548	6890	18385	5046
gr48	39	8857	15457	6757	13842	5046
gr48	40	8418	14667	6937	14987	5046
gr48	41	8419	15254	6808	17038	5046
gr48	42	9246	17203	6767	18255	5046
gr48	43	8027	14048	6886	14678	5046
gr48	44	8637	12541	6882	18132	5046
gr48	45	9125	17886	6762	14498	5046
gr48	46	8220	16595	6874	13252	5046
gr48	47	8412	16004	6864	13544	5046
hk48	0	16565	40458	15088	34162	11461
hk48	1	17961	42803	14611	33420	11461
hk48	2	18296	39624	15249	33420 34745	11461
hk48	3	17275	35303	14955	41275	11461
hk48	4	17224	35023	14808	35771	11461

hk48	5	18257	37340	15088	35612	11461	
hk48	6	19200	37442	14503	39993	11461	
hk48	7	17453	36616	14924	37261	11461	
hk48	8	17677	35986	14560	34667	11461	
hk48	9	17441	29168	15132	35524	11461	
hk48	10	17836	35116	15690	37581	11461	
hk48	11	17274	41645	15132	37798	11461	
hk48	12	17943	31291	15072	32751	11461	
hk48	13	17765	39123	15249	32698	11461	
hk48	14	17271	37303	15821	37412	11461	
hk48	15	16851	41230	15073	27762	11461	
hk48	16	17471	35828	14970	36905	11461	
hk48	17	18792	38671	15124	31049	11461	
hk48	18	17224	41363	14860	28342	11461	
hk48	19	16763	36080	14762	40608	11461	
hk48	20	18891	29993	14924	33995	11461	
hk48	21	17275	46214	14939	36384	11461	
hk48	22	17108	46539	14816	36796	11461	
hk48	23	17434	28999	15048	29271	11461	
hk48	24	18055	32285	15139	33326	11461	
hk48	25	16074	30630	15073	33409	11461	
hk48	26	17394	41245	14723	27384	11461	
hk48	27	16692	37496	14919	33715	11461	
hk48	28	17003	40493	15239	32623	11461	
hk48	29	17005	29464	14599	29627	11461	
hk48	30	16111	34653	15229	37882	11461	
hk48	31	20118	34453	15712	37882	11461	
hk48	32	17942	42886	15139	36767	11461	
hk48	33	17547	41874	14567	40693	11461	
hk48	34	16961	36690	14930	32569	11461	
hk48 hk48	35 36	17535 16757	35346 28411	14930 14599	41517 34527	11461 11461	
hk48	37	17514	44228	14635	39742	11461	
hk48					39742	11461	
	38	18113	30514	15712			
hk48	39	17457	35007	14560 14762	37588	11461 11461	
hk48	40	15748	37527		33576		
hk48	41	17558	42137	15050	33410	11461	
hk48	42	15878	37469	14723	35974	11461	
hk48	43	18359	41667	14623	42545	11461	
hk48	44	17045	39079	14806	27268	11461	
hk48	45	16722	41360	14806	37040	11461	
hk48	46	17160	36091	15048	43439	11461	
hk48	47	18007	36621	15840	29870	11461	
swiss42	0	2027	3833	1682	4377	1273	
swiss42	1	2016	4133	1690	4183	1273	
swiss42	2	1802	3952	1723	4031	1273	
swiss42	3	1865	3927	1690	3639	1273	
swiss42	4	2230	4401	1636	4040	1273	
swiss42	5	2033	4153	1611	4325	1273	
swiss42	6	2038	4123	1636	4131	1273	

swiss42	7	2056	4397	1610	4336	1273
swiss42	8	2296	4125	1617	4235	1273
swiss42	9	1916	3926	1667	4341	1273
swiss42	10	2098	3858	1612	4199	1273
swiss42	11	2078	4038	1725	2827	1273
swiss42	12	2029	4316	1699	4162	1273
swiss42	13	2060	4137	1683	4296	1273
swiss42	14	2162	3158	1647	4026	1273
swiss42	15	2058	4483	1667	4344	1273
swiss42	16	2052	3980	1667	3572	1273
swiss42	17	1976	3241	1749	3493	1273
swiss42	18	1862	3818	1712	3986	1273
swiss42	19	1928	3665	1712	3037	1273
swiss42	20	2024	3650	1699	4173	1273
swiss42	21	1947	3822	1706	4184	1273
swiss42	22	1962	4184	1610	4029	1273
swiss42	23	2038	3630	1735	3944	1273
swiss42	24	2034	4450	1738	3816	1273
swiss42	25	2139	4507	1723	3774	1273
swiss42	26	2014	4447	1735	3828	1273
swiss42	27	2090	4088	1671	2862	1273
swiss42	28	1898	4272	1749	3212	1273
swiss42	29	1900	3956	1587	4007	1273
swiss42	30	1967	4066	1603	2924	1273
swiss42	31	1958	4473	1612	3974	1273
swiss42	32	2076	4387	1687	4067	1273
swiss42	33	1841	3649	1724	2894	1273
swiss42	34	1974	4427	1687	2852	1273
swiss42	35	2071	3019	1721	3511	1273
swiss42	36	1879	3830	1704	3536	1273
swiss42	37	2043	3982	1728	2837	1273
swiss42	38	2061	3019	1724	2940	1273
swiss42	39	1957	3929	1728	4143	1273
swiss42	40	1854	5216	1738	3871	1273
swiss42	41	2163	3575	1602	3076	1273
pa561.tsp	0	4534	13472	3961	16242	2763
pa561.tsp	1	4561	13899	3966	16325	2763