



NEOS Server Version 5.0

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This information is provided without any express or implied warranty. In particular, there is no warranty of any kind concerning the fitness of this information for any particular purpose.

Job 4356793 has finished.

File exists

You are using the solver gurobi_ampl.

%% YOUR COMMENTS %%%%%%%%%%

variety budget 5 small

%%%%%%%%%

Checking ampl.mod for gurobi_options...

Checking ampl.com for gurobi_options...

Executing AMPL.

processing data.

processing commands.

Executing on neos-7.neos-server.org

Presolve eliminates 14291 constraints and 6 variables.

Adjusted problem:

1719 variables:

1671 binary variables

48 linear variables

2228 constraints, all linear; 19014 nonzeros

24 equality constraints

2204 inequality constraints

1 linear objective; 114 nonzeros.

Gurobi 6.5.0: threads=4

outlev=1

Optimize a model with 2228 rows, 1719 columns and 19014 nonzeros

Coefficient statistics:

Matrix range [1e+00, 1e+08]

Objective range [1e+00, 1e+00]

Bounds range [1e+00, 1e+00]

RHS range [1e+00, 2e+03]

Presolve removed 360 rows and 301 columns

Presolve time: 0.11s

Presolved: 1868 rows, 1418 columns, 16128 nonzeros

Variable types: 0 continuous, 1418 integer (1394 binary)

Found heuristic solution: objective 7462.5000000

Found heuristic solution: objective 5386.0000000

Root relaxation: objective 3.981320e+02, 2906 iterations, 0.11 seconds

Nodes	Current Node	Objective Bounds	Work
Expl Unexpl	Obj Depth IntInf	Incumbent BestBd Gap	It/Node Time

	0	0	398.13199	0	74	5386.00000	398.13199	92.6%	-	0s
H	0	0				4510.0000000	398.13199	91.2%	-	0s
H	0	0				2004.0000000	398.13199	80.1%	-	0s
H	0	0				1892.0000000	398.13199	79.0%	-	1s
	0	0	398.13199	0	83	1892.00000	398.13199	79.0%	-	1s
	0	0	398.23647	0	80	1892.00000	398.23647	79.0%	-	1s
H	0	0				1787.0000000	398.23647	77.7%	-	1s
	0	0	398.42590	0	93	1787.00000	398.42590	77.7%	-	1s
	0	0	398.44036	0	94	1787.00000	398.44036	77.7%	-	1s
	0	0	398.62025	0	96	1787.00000	398.62025	77.7%	-	1s
	0	0	398.62025	0	96	1787.00000	398.62025	77.7%	-	1s
	0	2	398.62025	0	96	1787.00000	398.62025	77.7%	-	1s
H	404	406				1711.0000000	421.73581	75.4%	13.8	3s
H	406	407				1506.0000000	421.73581	72.0%	13.8	3s
H	407	407				1328.0000000	421.73581	68.2%	13.8	3s
	1470	1244	995.33086	23	96	1328.00000	423.73414	68.1%	7.7	5s
H	1685	1321				1326.0000000	423.73414	68.0%	10.3	7s
	8155	5241	923.10911	65	31	1326.00000	497.99395	62.4%	7.0	10s
	21177	15408	1196.34824	106	96	1326.00000	541.85976	59.1%	6.3	46s
	21187	15415	1191.17561	99	98	1326.00000	541.85976	59.1%	6.3	50s
	21193	15419	702.19486	57	93	1326.00000	541.85976	59.1%	6.3	55s
	21205	15427	939.69077	52	102	1326.00000	541.85976	59.1%	6.3	61s
H	21210	14657				1287.0000000	541.85976	57.9%	6.3	64s
	21213	14659	702.19486	57	107	1287.00000	541.85976	57.9%	6.3	65s
	21217	14662	1196.34824	106	106	1287.00000	541.85976	57.9%	6.3	71s
	21221	14666	541.85976	24	74	1287.00000	541.85976	57.9%	6.5	75s
	22160	15020	1074.76852	130	28	1287.00000	541.85976	57.9%	7.0	80s
	32528	19421	995.02761	51	53	1287.00000	541.85976	57.9%	7.0	86s
	43804	24505	1015.24913	56	44	1287.00000	543.23524	57.8%	6.8	91s
	54050	28881	944.69780	104	26	1287.00000	565.60470	56.1%	6.8	95s
	64423	33062	748.40022	48	48	1287.00000	581.59171	54.8%	6.8	100s
	75670	41111	823.98336	48	34	1287.00000	594.55774	53.8%	6.7	105s
	86239	48868	987.72308	122	34	1287.00000	604.00036	53.1%	6.7	110s
	96658	56245	infeasible	87		1287.00000	612.79780	52.4%	6.6	115s
	106903	63751	835.67901	45	44	1287.00000	620.56984	51.8%	6.6	121s
	114243	69220	758.63101	40	56	1287.00000	625.30629	51.4%	6.6	125s
	125184	77026	1120.54792	34	49	1287.00000	632.28037	50.9%	6.6	130s
H	127526	66721				1184.0000000	633.60081	46.5%	6.6	131s
	132965	70354	765.29294	43	52	1184.00000	637.50522	46.2%	6.6	135s
	143526	77159	703.30639	38	50	1184.00000	644.38640	45.6%	6.6	140s
	153083	83187	cutoff	70		1184.00000	649.93571	45.1%	6.6	145s
	162145	88810	920.15712	51	43	1184.00000	656.82806	44.5%	6.6	150s
	171624	94675	949.18462	87	28	1184.00000	661.77367	44.1%	6.6	155s
	181676	100884	1174.07235	51	21	1184.00000	666.29200	43.7%	6.6	160s
	191486	106742	1016.13573	81	24	1184.00000	670.77698	43.3%	6.6	165s
	201781	113133	1174.92314	70	30	1184.00000	675.21063	43.0%	6.6	170s
	212237	119373	894.12764	48	52	1184.00000	679.89668	42.6%	6.6	175s
	222507	125469	infeasible	57		1184.00000	683.88336	42.2%	6.6	180s
	231996	131508	cutoff	46		1184.00000	687.32884	41.9%	6.6	185s
	240571	136654	1026.78656	53	33	1184.00000	690.52259	41.7%	6.5	190s
	248087	141073	1127.95195	44	36	1184.00000	692.88949	41.5%	6.5	195s
	255532	145562	1117.55234	52	35	1184.00000	695.24091	41.3%	6.5	200s
	264062	150488	1152.12550	48	50	1184.00000	698.17031	41.0%	6.5	205s
*	268623	149177		71		1166.0000000	699.55158	40.0%	6.5	207s
	274137	152400	771.28603	48	16	1166.00000	701.46696	39.8%	6.5	210s
	282986	157442	1079.06295	60	21	1166.00000	704.56650	39.6%	6.5	215s
*	286350	136135		65		1103.0000000	705.34635	36.1%	6.5	217s
	290888	138503	981.70255	55	29	1103.00000	706.81381	35.9%	6.5	220s
	296797	141463	1068.32591	69	24	1103.00000	708.90573	35.7%	6.5	225s
	305368	145684	917.91095	67	41	1103.00000	712.08564	35.4%	6.5	230s
	313826	149993	994.30852	62	42	1103.00000	714.59888	35.2%	6.5	235s
	321617	153933	818.16366	42	36	1103.00000	717.04657	35.0%	6.5	240s
	329490	158043	1098.71803	71	51	1103.00000	719.32372	34.8%	6.5	245s
	337844	162281	936.47186	45	38	1103.00000	721.73672	34.6%	6.5	251s
	344969	165801	868.07872	59	29	1103.00000	723.61208	34.4%	6.4	255s
	353453	170052	1052.34864	53	25	1103.00000	725.78222	34.2%	6.4	260s
	361921	174439	928.43244	56	33	1103.00000	727.99034	34.0%	6.4	265s
	370554	178714	850.03930	42	65	1103.00000	730.24362	33.8%	6.4	270s
	379526	183152	infeasible	56		1103.00000	732.48975	33.6%	6.4	275s
	388416	187583	1004.00485	61	43	1103.00000	734.61507	33.4%	6.4	280s
	395310	190894	804.79829	39	47	1103.00000	736.29718	33.2%	6.4	285s

402485	194157	1036.97235	47	32	1103.00000	737.82860	33.1%	6.4	290s
410577	198085	cutoff	59		1103.00000	739.58570	32.9%	6.4	295s
420518	203021	987.90067	68	20	1103.00000	741.60372	32.8%	6.4	300s
427409	206527	cutoff	70		1103.00000	743.01910	32.6%	6.4	305s
434036	209587	975.18002	50	28	1103.00000	744.55635	32.5%	6.4	310s
442226	213520	855.66021	58	37	1103.00000	746.26778	32.3%	6.4	315s
451146	217738	945.84356	42	38	1103.00000	747.96999	32.2%	6.4	320s
459854	221963	907.37101	49	40	1103.00000	749.79322	32.0%	6.3	325s
468336	226068	867.36573	44	50	1103.00000	751.47403	31.9%	6.3	330s
475821	229756	814.09703	65	39	1103.00000	752.73660	31.8%	6.3	335s
485023	234373	891.58597	54	39	1103.00000	754.17382	31.6%	6.3	340s
494359	238740	1084.86906	53	21	1103.00000	755.89149	31.5%	6.3	345s
504507	243572	cutoff	68		1103.00000	757.61393	31.3%	6.3	351s
514106	248209	935.83719	42	32	1103.00000	759.18585	31.2%	6.3	355s
523856	252728	cutoff	50		1103.00000	760.78662	31.0%	6.3	360s
532322	256652	980.02953	42	32	1103.00000	762.30442	30.9%	6.3	365s
542525	261370	cutoff	53		1103.00000	763.94939	30.7%	6.3	370s
551929	265800	cutoff	56		1103.00000	765.41476	30.6%	6.3	375s
561743	270253	cutoff	72		1103.00000	766.86871	30.5%	6.3	380s
571818	274893	935.09879	50	36	1103.00000	768.40427	30.3%	6.2	385s
581158	279326	1098.95866	60	42	1103.00000	769.77275	30.2%	6.2	390s
*588267	258914		61		1068.0000000	770.77062	27.8%	6.2	393s
589111	259314	856.65557	49	52	1068.00000	770.92595	27.8%	6.2	395s
598855	263253	877.24738	56	36	1068.00000	772.48091	27.7%	6.2	400s
608109	267079	infeasible	50		1068.00000	773.90232	27.5%	6.2	405s
614146	269401	810.82835	56	36	1068.00000	774.92903	27.4%	6.2	410s
622648	272889	973.60822	46	32	1068.00000	776.25147	27.3%	6.2	415s
632054	276643	1058.50922	40	24	1068.00000	777.70481	27.2%	6.2	420s
641335	280275	872.90256	51	43	1068.00000	779.11133	27.0%	6.2	425s
650624	283896	820.21105	44	43	1068.00000	780.43701	26.9%	6.2	430s
660637	287832	cutoff	82		1068.00000	781.83071	26.8%	6.2	435s
668530	290830	cutoff	44		1068.00000	782.96629	26.7%	6.2	440s
677924	294384	932.03460	54	28	1068.00000	784.24078	26.6%	6.2	445s
686779	298180	991.76167	58	36	1068.00000	785.49721	26.5%	6.2	450s
695476	301671	1014.46896	48	35	1068.00000	786.63621	26.3%	6.2	455s
704397	305233	1016.93039	56	21	1068.00000	787.83864	26.2%	6.2	460s
714747	309507	806.13855	42	56	1068.00000	789.01671	26.1%	6.2	465s
724856	313304	1012.31756	54	18	1068.00000	790.34330	26.0%	6.2	470s
734164	317000	905.48011	47	37	1068.00000	791.49805	25.9%	6.2	475s
743526	320715	882.24831	50	33	1068.00000	792.64179	25.8%	6.2	480s
753260	324390	1014.36428	40	36	1068.00000	793.91717	25.7%	6.1	485s
762879	328117	921.54769	50	22	1068.00000	795.06868	25.6%	6.1	490s
771887	331707	909.24088	57	40	1068.00000	796.10719	25.5%	6.1	495s
778404	333951	953.74662	48	26	1068.00000	797.06681	25.4%	6.1	500s
788849	337767	cutoff	72		1068.00000	798.31834	25.3%	6.1	505s
797497	340941	990.54172	41	24	1068.00000	799.33313	25.2%	6.1	510s
806617	344476	1048.52449	47	28	1068.00000	800.26528	25.1%	6.1	515s
816414	348222	1001.25942	46	50	1068.00000	801.42655	25.0%	6.1	520s
824517	351211	infeasible	87		1068.00000	802.33547	24.9%	6.1	525s
832895	354407	1025.87225	49	25	1068.00000	803.26793	24.8%	6.1	530s
841180	357495	cutoff	53		1068.00000	804.16961	24.7%	6.1	535s
851246	361381	931.88421	65	30	1068.00000	805.33180	24.6%	6.1	540s
861561	365238	cutoff	62		1068.00000	806.37263	24.5%	6.1	545s
871759	368988	cutoff	54		1068.00000	807.37970	24.4%	6.1	550s
880735	372180	955.29052	53	33	1068.00000	808.26643	24.3%	6.1	555s
889264	375340	869.12638	79	30	1068.00000	809.11387	24.2%	6.1	560s
900693	379432	cutoff	50		1068.00000	810.20964	24.1%	6.1	565s
910748	383182	cutoff	65		1068.00000	811.18943	24.0%	6.1	570s
921914	386997	977.07377	54	33	1068.00000	812.29865	23.9%	6.1	575s
932946	391057	cutoff	57		1068.00000	813.31704	23.8%	6.1	580s
942523	394620	874.44033	52	40	1068.00000	814.26418	23.8%	6.1	585s
951617	397762	1026.56685	51	32	1068.00000	815.14821	23.7%	6.0	590s
961437	401291	950.50597	54	42	1068.00000	816.07647	23.6%	6.0	595s
970198	404354	976.61678	66	36	1068.00000	816.85937	23.5%	6.0	600s
979222	407543	910.71744	59	32	1068.00000	817.63096	23.4%	6.0	605s
987290	410237	964.64363	60	18	1068.00000	818.42877	23.4%	6.0	610s
996677	413498	841.30148	40	64	1068.00000	819.26319	23.3%	6.0	615s
1005850	416691	886.13723	51	43	1068.00000	820.05373	23.2%	6.0	620s
1015340	419788	infeasible	73		1068.00000	820.91304	23.1%	6.0	625s
1025526	423216	cutoff	51		1068.00000	821.76865	23.1%	6.0	630s
1035088	426550	infeasible	65		1068.00000	822.58147	23.0%	6.0	635s

1044913	430013	887.65309	46	48	1068.00000	823.39843	22.9%	6.0	640s
H1044914	405531				1048.0000000	823.39843	21.4%	6.0	640s
1049717	406838	965.22049	65	30	1048.00000	823.86349	21.4%	6.0	645s
1059568	409467	cutoff	49		1048.00000	824.81734	21.3%	6.0	650s
1070146	413008	971.50154	47	28	1048.00000	825.68861	21.2%	6.0	655s
1077465	415145	856.94834	43	51	1048.00000	826.40008	21.1%	6.0	660s
1087588	418318	883.85736	50	35	1048.00000	827.22773	21.1%	6.0	665s
1095874	420678	846.39901	52	29	1048.00000	827.98788	21.0%	6.0	670s
1106454	423963	cutoff	60		1048.00000	828.84107	20.9%	6.0	675s
1117009	427342	cutoff	74		1048.00000	829.70961	20.8%	6.0	680s
1126437	430040	878.97382	50	34	1048.00000	830.52696	20.8%	6.0	685s
1135213	432755	999.60046	71	38	1048.00000	831.28874	20.7%	6.0	690s
1145059	435725	908.54611	52	26	1048.00000	832.05380	20.6%	6.0	695s
1155131	438879	959.45059	33	28	1048.00000	832.86518	20.5%	6.0	700s
1165664	441945	infeasible	67		1048.00000	833.70313	20.4%	6.0	705s
1175525	444912	887.83882	74	39	1048.00000	834.44831	20.4%	6.0	710s
1185390	447780	1002.17607	72	37	1048.00000	835.33423	20.3%	6.0	715s
1193126	450067	897.43125	54	35	1048.00000	835.94983	20.2%	6.0	720s
1201533	452653	cutoff	55		1048.00000	836.57076	20.2%	6.0	725s
1209983	454650	949.26959	49	40	1048.00000	837.26256	20.1%	5.9	730s
1219179	457314	926.07604	50	24	1048.00000	837.95403	20.0%	5.9	735s
1228570	459997	858.25413	78	30	1048.00000	838.63817	20.0%	5.9	740s
1235364	461904	cutoff	55		1048.00000	839.10337	19.9%	5.9	745s
1242587	463853	cutoff	87		1048.00000	839.65977	19.9%	5.9	750s
1250959	466161	919.41675	53	33	1048.00000	840.24836	19.8%	5.9	755s
1261094	468938	987.91184	51	49	1048.00000	841.04126	19.7%	5.9	760s
1270829	471892	cutoff	45		1048.00000	841.70698	19.7%	5.9	765s
1281115	474714	877.40810	50	47	1048.00000	842.46427	19.6%	5.9	770s
1289505	477082	967.06624	42	34	1048.00000	843.05189	19.6%	5.9	775s
1299665	480087	936.02415	41	36	1048.00000	843.79733	19.5%	5.9	780s
1308873	482672	865.14438	41	47	1048.00000	844.41440	19.4%	5.9	785s
1316946	484823	983.33807	60	27	1048.00000	845.01022	19.4%	5.9	790s
1323911	486689	942.52119	57	31	1048.00000	845.49636	19.3%	5.9	795s
1333460	489198	846.83012	55	37	1048.00000	846.14925	19.3%	5.9	800s
1342965	491511	952.52796	54	29	1048.00000	846.81112	19.2%	5.9	805s
1351895	494098	cutoff	45		1048.00000	847.41773	19.1%	5.9	810s
1359830	496227	935.93984	58	31	1048.00000	847.94295	19.1%	5.9	815s
1368358	498391	963.26717	60	36	1048.00000	848.52740	19.0%	5.9	820s
1375871	500419	891.12602	73	30	1048.00000	849.01736	19.0%	5.9	825s
1385715	502912	894.17233	57	49	1048.00000	849.67322	18.9%	5.9	830s
1396167	505629	852.75411	50	26	1048.00000	850.38135	18.9%	5.9	836s
1405376	508083	cutoff	52		1048.00000	850.97157	18.8%	5.9	840s
1415088	510586	1034.50055	54	24	1048.00000	851.63236	18.7%	5.9	845s
1423437	512620	941.91601	47	29	1048.00000	852.19677	18.7%	5.9	850s
1432620	514839	cutoff	53		1048.00000	852.79706	18.6%	5.9	855s
H1438134	514659				1047.0000000	853.14437	18.5%	5.9	859s
1438299	514651	940.78368	180	21	1047.00000	853.16316	18.5%	5.9	860s
1447993	517092	914.27563	62	35	1047.00000	853.78709	18.5%	5.9	865s
1457799	519561	952.65447	47	46	1047.00000	854.39274	18.4%	5.9	870s
1466804	521928	cutoff	72		1047.00000	854.95033	18.3%	5.9	875s
1477409	524627	883.27767	52	38	1047.00000	855.59609	18.3%	5.9	880s
1484934	526226	924.19988	55	43	1047.00000	856.13722	18.2%	5.9	885s
1494611	528638	991.83224	71	31	1047.00000	856.75828	18.2%	5.9	890s
1504029	531155	899.98740	54	36	1047.00000	857.28323	18.1%	5.9	895s
1514939	534029	cutoff	63		1047.00000	857.93677	18.1%	5.9	900s
1525069	536820	cutoff	46		1047.00000	858.50859	18.0%	5.9	905s
1534049	538911	895.24339	50	28	1047.00000	859.07884	17.9%	5.9	910s
1542550	540791	903.33494	57	48	1047.00000	859.59672	17.9%	5.8	915s
1551186	542815	cutoff	64		1047.00000	860.17012	17.8%	5.8	920s
1561081	545110	999.64775	81	36	1047.00000	860.72835	17.8%	5.8	925s
1569481	546998	988.07413	61	30	1047.00000	861.18699	17.7%	5.8	930s
1577878	548782	882.31168	47	33	1047.00000	861.72513	17.7%	5.8	935s
1587464	551118	925.24488	43	36	1047.00000	862.28115	17.6%	5.8	940s
1595975	552837	998.56068	60	35	1047.00000	862.82508	17.6%	5.8	945s
1604728	554827	969.30478	54	45	1047.00000	863.36379	17.5%	5.8	950s
1611356	556223	868.28363	47	26	1047.00000	863.75599	17.5%	5.8	955s
1620394	558542	897.41478	54	34	1047.00000	864.25320	17.5%	5.8	960s
1629304	560615	1005.56844	58	29	1047.00000	864.74713	17.4%	5.8	965s
1637628	562397	896.13612	63	39	1047.00000	865.22027	17.4%	5.8	970s
1647377	564527	cutoff	71		1047.00000	865.79282	17.3%	5.8	975s
1656218	566458	950.85121	62	42	1047.00000	866.28471	17.3%	5.8	980s

1666663	568802	cutoff	46		1047.00000	866.88988	17.2%	5.8	985s
1675583	570716	920.11949	43	37	1047.00000	867.39017	17.2%	5.8	990s
1683836	572554	889.68052	53	31	1047.00000	867.81730	17.1%	5.8	995s
1692224	574458	934.72741	55	30	1047.00000	868.26941	17.1%	5.8	1000s
1701571	576421	cutoff	58		1047.00000	868.75053	17.0%	5.8	1005s
1710299	578104	1016.85164	53	40	1047.00000	869.19468	17.0%	5.8	1010s
1720311	580206	958.72374	56	16	1047.00000	869.72809	16.9%	5.8	1015s
1730818	582469	cutoff	58		1047.00000	870.28346	16.9%	5.8	1020s
1741186	584745	cutoff	58		1047.00000	870.83210	16.8%	5.8	1026s
1750550	586772	929.45583	64	46	1047.00000	871.31302	16.8%	5.8	1030s
1759650	588516	996.14381	61	31	1047.00000	871.76449	16.7%	5.8	1035s
1768455	590214	935.00203	52	35	1047.00000	872.25002	16.7%	5.8	1040s
1777843	592257	cutoff	51		1047.00000	872.71935	16.6%	5.8	1045s
1785819	593800	1017.09616	44	42	1047.00000	873.13261	16.6%	5.8	1050s
1795555	595746	988.77114	66	39	1047.00000	873.64468	16.6%	5.8	1055s
1805647	597966	966.05986	48	25	1047.00000	874.13480	16.5%	5.8	1060s
1814927	599879	980.31133	63	40	1047.00000	874.59017	16.5%	5.8	1065s
1825605	602297	cutoff	56		1047.00000	875.07861	16.4%	5.8	1070s
1835589	604450	890.23544	54	33	1047.00000	875.56291	16.4%	5.8	1075s
1844653	606101	984.18155	50	36	1047.00000	876.03674	16.3%	5.8	1080s
1854656	608006	986.60537	53	33	1047.00000	876.52843	16.3%	5.8	1085s
1863847	609668	cutoff	43		1047.00000	876.98034	16.2%	5.8	1090s
1872027	611089	933.08253	46	27	1047.00000	877.39287	16.2%	5.8	1095s
1880692	612571	cutoff	57		1047.00000	877.82914	16.2%	5.8	1100s
1888960	614309	infeasible	59		1047.00000	878.21457	16.1%	5.8	1105s
1896937	615607	cutoff	49		1047.00000	878.60873	16.1%	5.8	1110s
1905837	617019	1045.60071	61	25	1047.00000	879.05926	16.0%	5.8	1115s
1913342	618161	cutoff	49		1047.00000	879.40539	16.0%	5.8	1120s
1922960	620121	cutoff	53		1047.00000	879.84832	16.0%	5.8	1125s
1932434	621748	890.74535	49	55	1047.00000	880.32608	15.9%	5.8	1130s
1942744	623472	927.31638	47	35	1047.00000	880.83031	15.9%	5.8	1135s
1951029	624858	1007.03556	68	30	1047.00000	881.23300	15.8%	5.8	1140s
1959598	626319	906.80423	44	47	1047.00000	881.65609	15.8%	5.8	1145s
1970017	628160	970.16058	62	31	1047.00000	882.13758	15.7%	5.7	1151s
1979600	629954	1009.91311	56	36	1047.00000	882.56047	15.7%	5.7	1155s
1988857	631469	906.67020	49	51	1047.00000	882.99785	15.7%	5.7	1160s
1996978	632988	939.02300	60	40	1047.00000	883.35320	15.6%	5.7	1165s
2005913	634668	infeasible	53		1047.00000	883.74249	15.6%	5.7	1170s
2014208	636229	1021.43841	73	37	1047.00000	884.10849	15.6%	5.7	1175s
2023566	637854	979.32268	51	41	1047.00000	884.52404	15.5%	5.7	1180s
2032894	639474	943.32009	51	35	1047.00000	884.96472	15.5%	5.7	1185s
2041531	641056	963.75522	42	54	1047.00000	885.34860	15.4%	5.7	1190s
2047710	641763	971.17215	62	33	1047.00000	885.63162	15.4%	5.7	1195s
2056035	643323	cutoff	48		1047.00000	885.97942	15.4%	5.7	1200s
2064005	644667	cutoff	75		1047.00000	886.36723	15.3%	5.7	1205s
2073104	646013	902.34294	51	29	1047.00000	886.79208	15.3%	5.7	1210s
2079839	647094	cutoff	54		1047.00000	887.09109	15.3%	5.7	1215s
2088229	648297	991.21656	56	29	1047.00000	887.47632	15.2%	5.7	1220s
2096881	649499	890.79833	48	46	1047.00000	887.87572	15.2%	5.7	1225s
2105816	651017	983.53046	47	24	1047.00000	888.23622	15.2%	5.7	1230s
2116458	652598	cutoff	59		1047.00000	888.69280	15.1%	5.7	1235s
2126855	654069	1010.62561	51	45	1047.00000	889.17287	15.1%	5.7	1240s
2137469	655517	cutoff	79		1047.00000	889.63307	15.0%	5.7	1245s
2145787	656791	998.19644	56	19	1047.00000	889.99811	15.0%	5.7	1250s
2154863	658180	994.88829	54	21	1047.00000	890.36903	15.0%	5.7	1255s
2162885	659502	1016.89913	55	28	1047.00000	890.69778	14.9%	5.7	1260s
2174740	661610	914.42651	61	33	1047.00000	891.18271	14.9%	5.7	1265s
2181560	662460	928.85878	62	34	1047.00000	891.47586	14.9%	5.7	1270s
2190180	663553	infeasible	63		1047.00000	891.85150	14.8%	5.7	1275s
2200928	665163	958.59711	58	41	1047.00000	892.30072	14.8%	5.7	1280s
2210633	666591	1027.42665	62	34	1047.00000	892.70696	14.7%	5.7	1285s
2220645	668121	cutoff	59		1047.00000	893.10456	14.7%	5.7	1290s
2231526	669903	1021.03331	56	43	1047.00000	893.54493	14.7%	5.7	1295s
2240434	671152	1024.24506	50	29	1047.00000	893.90528	14.6%	5.7	1300s
2250436	672548	957.81680	51	38	1047.00000	894.33721	14.6%	5.7	1305s
2259625	673709	cutoff	50		1047.00000	894.73540	14.5%	5.7	1310s
2269036	675254	928.80585	54	42	1047.00000	895.09933	14.5%	5.7	1315s
2276782	676061	cutoff	53		1047.00000	895.42675	14.5%	5.7	1320s
2285272	676951	927.77943	54	41	1047.00000	895.78581	14.4%	5.7	1325s
2295121	678173	971.96992	57	37	1047.00000	896.22036	14.4%	5.7	1330s
2303766	679171	964.72863	50	28	1047.00000	896.56105	14.4%	5.7	1335s

2313418	680670	918.08440	48	23	1047.00000	896.90853	14.3%	5.7	1340s
2321940	681730	983.14658	70	34	1047.00000	897.27810	14.3%	5.7	1345s
2329056	682379	cutoff	43		1047.00000	897.55444	14.3%	5.7	1350s
2338129	683496	cutoff	45		1047.00000	897.92523	14.2%	5.7	1355s
2347457	684758	infeasible	54		1047.00000	898.27906	14.2%	5.7	1360s
2358190	686328	cutoff	52		1047.00000	898.68519	14.2%	5.7	1365s
2368610	687871	cutoff	64		1047.00000	899.08670	14.1%	5.7	1370s
2379080	689279	1043.93488	62	50	1047.00000	899.50713	14.1%	5.7	1375s
2389568	690650	1023.09569	59	33	1047.00000	899.92303	14.0%	5.7	1380s
2400117	691770	1026.63328	56	31	1047.00000	900.35028	14.0%	5.7	1385s
2409628	692935	cutoff	47		1047.00000	900.72414	14.0%	5.7	1390s
2418106	693765	901.68932	47	49	1047.00000	901.06682	13.9%	5.7	1395s
2426366	694648	1043.75447	54	43	1047.00000	901.39227	13.9%	5.7	1400s
2435302	695694	984.30375	57	31	1047.00000	901.74823	13.9%	5.7	1405s
2443566	696468	1021.41665	57	51	1047.00000	902.09280	13.8%	5.7	1410s
2452676	697407	946.73366	61	43	1047.00000	902.47314	13.8%	5.7	1415s
2462721	698888	1013.10971	54	32	1047.00000	902.79073	13.8%	5.7	1420s
2472717	699941	cutoff	75		1047.00000	903.18315	13.7%	5.7	1425s
2483584	701286	947.18993	47	47	1047.00000	903.56290	13.7%	5.7	1430s
2493266	702044	962.91257	45	41	1047.00000	903.93793	13.7%	5.7	1435s
2503670	703258	1017.61473	51	32	1047.00000	904.32916	13.6%	5.6	1440s
2513981	704614	976.47711	62	45	1047.00000	904.68817	13.6%	5.6	1445s
2524649	705779	920.80769	61	33	1047.00000	905.07908	13.6%	5.6	1450s
2535519	707145	926.52507	57	40	1047.00000	905.45138	13.5%	5.6	1455s
2546519	708501	968.44920	45	57	1047.00000	905.83966	13.5%	5.6	1460s
2556398	709559	cutoff	55		1047.00000	906.20616	13.4%	5.6	1465s
2566023	710394	cutoff	54		1047.00000	906.57669	13.4%	5.6	1470s
2576273	711157	1023.59214	64	38	1047.00000	906.95203	13.4%	5.6	1475s
2586810	712086	1023.28094	54	20	1047.00000	907.31996	13.3%	5.6	1480s
2596351	712874	cutoff	48		1047.00000	907.66934	13.3%	5.6	1485s
2606635	713860	975.20298	64	37	1047.00000	908.04508	13.3%	5.6	1490s
2616382	714662	cutoff	62		1047.00000	908.42729	13.2%	5.6	1495s
2626546	715614	cutoff	65		1047.00000	908.79621	13.2%	5.6	1500s
2637953	716524	946.99838	62	24	1047.00000	909.20566	13.2%	5.6	1505s
2648213	717441	930.03791	44	45	1047.00000	909.56910	13.1%	5.6	1510s
2658364	718494	cutoff	54		1047.00000	909.91712	13.1%	5.6	1515s
2667608	719303	956.96238	59	17	1047.00000	910.25150	13.1%	5.6	1520s
2677425	720142	998.83484	50	33	1047.00000	910.58657	13.0%	5.6	1525s
2685640	720855	917.65480	53	28	1047.00000	910.86693	13.0%	5.6	1530s
2696364	721826	986.93482	62	28	1047.00000	911.23984	13.0%	5.6	1535s
2704093	722389	975.66016	58	40	1047.00000	911.50658	12.9%	5.6	1540s
2714897	723236	cutoff	67		1047.00000	911.89817	12.9%	5.6	1545s
2723280	723638	cutoff	49		1047.00000	912.21266	12.9%	5.6	1550s
2732967	724126	cutoff	51		1047.00000	912.57732	12.8%	5.6	1555s
2741793	724593	988.99705	44	25	1047.00000	912.88667	12.8%	5.6	1560s
2752344	725630	970.80109	48	53	1047.00000	913.23454	12.8%	5.6	1565s
2761971	726374	984.24739	76	30	1047.00000	913.56162	12.7%	5.6	1570s
2769912	726896	1033.52488	52	32	1047.00000	913.84649	12.7%	5.6	1575s
2779394	727612	974.20443	49	44	1047.00000	914.16951	12.7%	5.6	1580s
2788167	728202	947.96335	57	28	1047.00000	914.49252	12.7%	5.6	1585s
2797472	728954	943.34779	59	28	1047.00000	914.80195	12.6%	5.6	1590s
2808273	729608	965.93269	52	46	1047.00000	915.18305	12.6%	5.6	1595s
2817448	729977	959.12877	55	32	1047.00000	915.49864	12.6%	5.6	1600s
2827622	730266	976.00779	46	28	1047.00000	915.86443	12.5%	5.6	1605s
2834848	730660	970.78054	50	46	1047.00000	916.13222	12.5%	5.6	1610s
2844263	731174	978.87783	75	36	1047.00000	916.47646	12.5%	5.6	1615s
2853534	731664	cutoff	51		1047.00000	916.78447	12.4%	5.6	1620s
2862134	731836	cutoff	52		1047.00000	917.08234	12.4%	5.6	1625s
2872290	732189	cutoff	66		1047.00000	917.42716	12.4%	5.6	1630s
2881548	732745	1011.92852	54	45	1047.00000	917.74902	12.3%	5.6	1635s
2890948	733175	947.60191	60	32	1047.00000	918.09120	12.3%	5.6	1640s
2899189	733443	cutoff	60		1047.00000	918.38014	12.3%	5.6	1645s
2907768	733623	965.60215	59	35	1047.00000	918.68244	12.3%	5.6	1650s
2917485	734105	cutoff	62		1047.00000	919.01624	12.2%	5.6	1655s
2927469	734852	1030.68805	54	27	1047.00000	919.33684	12.2%	5.6	1660s
2936184	735138	982.73786	46	36	1047.00000	919.63530	12.2%	5.6	1665s
2946086	735602	cutoff	61		1047.00000	919.96506	12.1%	5.6	1670s
2955381	736057	cutoff	70		1047.00000	920.27618	12.1%	5.6	1675s
2964431	736481	1025.48383	56	30	1047.00000	920.57215	12.1%	5.6	1680s
2972679	736853	1039.50552	56	30	1047.00000	920.83958	12.0%	5.6	1685s
2981946	737368	cutoff	51		1047.00000	921.13630	12.0%	5.6	1690s

2991393	737725	975.73309	65	36	1047.00000	921.43656	12.0%	5.6	1695s
3000636	738184	cutoff	67		1047.00000	921.73034	12.0%	5.6	1700s
3009320	738359	966.74708	71	50	1047.00000	922.01140	11.9%	5.6	1705s
3017929	738605	cutoff	47		1047.00000	922.30554	11.9%	5.6	1710s
3027999	739107	cutoff	64		1047.00000	922.63015	11.9%	5.6	1715s
3037206	739581	cutoff	50		1047.00000	922.92455	11.9%	5.6	1720s
3046789	739926	948.52918	51	39	1047.00000	923.22745	11.8%	5.6	1725s
3054746	740271	cutoff	56		1047.00000	923.47476	11.8%	5.6	1730s
3062705	740555	infeasible	63		1047.00000	923.73950	11.8%	5.6	1735s
3072072	740751	cutoff	69		1047.00000	924.05507	11.7%	5.6	1740s
3082279	741021	cutoff	65		1047.00000	924.38819	11.7%	5.6	1745s
3090697	741117	968.64768	75	35	1047.00000	924.66876	11.7%	5.6	1750s
3099800	741321	934.66389	48	41	1047.00000	924.96555	11.7%	5.6	1755s
3108889	741584	infeasible	48		1047.00000	925.25283	11.6%	5.6	1760s
3117370	741702	cutoff	45		1047.00000	925.55081	11.6%	5.6	1765s
3127629	742004	991.05095	64	20	1047.00000	925.87870	11.6%	5.6	1770s
3136755	742199	cutoff	69		1047.00000	926.16827	11.5%	5.6	1775s
3147435	742596	cutoff	68		1047.00000	926.51596	11.5%	5.6	1780s
3155684	742592	988.44115	47	27	1047.00000	926.79660	11.5%	5.6	1785s
3164938	742678	979.96681	60	16	1047.00000	927.09478	11.5%	5.6	1790s
3173933	742893	992.48180	66	16	1047.00000	927.37916	11.4%	5.6	1795s
3181381	742917	939.94642	49	26	1047.00000	927.61429	11.4%	5.6	1800s
3190711	743100	cutoff	58		1047.00000	927.90775	11.4%	5.6	1805s
3200854	743385	965.16577	65	29	1047.00000	928.21110	11.3%	5.6	1810s
3209163	743464	cutoff	66		1047.00000	928.47723	11.3%	5.6	1815s
3216664	743455	997.18482	64	35	1047.00000	928.71375	11.3%	5.6	1820s
3225161	743541	cutoff	45		1047.00000	928.98166	11.3%	5.6	1825s
3234342	743695	cutoff	60		1047.00000	929.25356	11.2%	5.5	1831s
3240809	743665	973.72634	52	39	1047.00000	929.46149	11.2%	5.5	1835s
3249864	743758	1026.19302	56	24	1047.00000	929.73887	11.2%	5.5	1840s
3258438	743953	cutoff	56		1047.00000	930.00440	11.2%	5.5	1845s
3266593	743891	1000.03646	56	34	1047.00000	930.27746	11.1%	5.5	1850s
3275344	743626	1009.82549	66	28	1047.00000	930.56609	11.1%	5.5	1855s
3282932	743563	cutoff	44		1047.00000	930.80198	11.1%	5.5	1860s
3290445	743612	infeasible	53		1047.00000	931.03006	11.1%	5.5	1865s
3300645	743661	infeasible	44		1047.00000	931.35016	11.0%	5.5	1870s
3310307	743620	935.93285	64	44	1047.00000	931.65952	11.0%	5.5	1875s
3320956	743494	cutoff	64		1047.00000	932.00336	11.0%	5.5	1880s
3329171	743573	967.28945	50	27	1047.00000	932.24409	11.0%	5.5	1885s
3337964	743513	1026.60798	62	41	1047.00000	932.50992	10.9%	5.5	1890s
3345400	743591	cutoff	66		1047.00000	932.73554	10.9%	5.5	1895s
3350883	743339	982.68663	45	46	1047.00000	932.91414	10.9%	5.5	1900s
3359640	743295	cutoff	72		1047.00000	933.19549	10.9%	5.5	1905s
3366488	743283	1027.99462	48	28	1047.00000	933.40614	10.8%	5.5	1910s
3373568	743286	1030.38045	50	53	1047.00000	933.61997	10.8%	5.5	1915s
3379766	743073	957.13169	81	34	1047.00000	933.80584	10.8%	5.5	1920s
3387813	743028	1031.66159	59	33	1047.00000	934.02713	10.8%	5.5	1926s
3395005	742883	980.34300	61	26	1047.00000	934.24964	10.8%	5.5	1930s
3401917	742735	998.06192	45	35	1047.00000	934.46599	10.7%	5.5	1935s
3409338	742812	977.86087	59	46	1047.00000	934.68868	10.7%	5.5	1940s
3419267	742847	1023.77077	56	21	1047.00000	934.98263	10.7%	5.5	1945s
3427697	742754	cutoff	65		1047.00000	935.23318	10.7%	5.5	1950s
3435419	742627	991.36017	52	28	1047.00000	935.47480	10.7%	5.5	1955s
3443023	742338	cutoff	50		1047.00000	935.71795	10.6%	5.5	1960s
3448481	742096	cutoff	55		1047.00000	935.87937	10.6%	5.5	1965s
3456977	742010	cutoff	47		1047.00000	936.14215	10.6%	5.5	1970s
3465627	741817	941.53784	43	40	1047.00000	936.39571	10.6%	5.5	1975s
3473364	741545	cutoff	37		1047.00000	936.64071	10.5%	5.5	1980s
3479921	741256	1014.70639	55	39	1047.00000	936.83848	10.5%	5.5	1985s
3489440	741174	cutoff	60		1047.00000	937.11038	10.5%	5.5	1991s
3496918	740778	952.41168	54	44	1047.00000	937.32877	10.5%	5.5	1995s
3506526	740342	974.75387	64	30	1047.00000	937.63722	10.4%	5.5	2000s
3514714	740134	cutoff	55		1047.00000	937.88217	10.4%	5.5	2005s
3522551	739983	938.18267	59	54	1047.00000	938.12463	10.4%	5.5	2010s
3531181	739798	cutoff	54		1047.00000	938.38399	10.4%	5.5	2015s
3539114	739470	1034.18032	50	25	1047.00000	938.62696	10.4%	5.5	2020s
3546421	739164	1008.38192	76	29	1047.00000	938.83808	10.3%	5.5	2025s
3554655	738778	infeasible	61		1047.00000	939.09769	10.3%	5.5	2030s
3563137	738346	cutoff	54		1047.00000	939.34433	10.3%	5.5	2035s
3571619	737905	1033.45213	67	31	1047.00000	939.60320	10.3%	5.5	2040s
3581945	737619	cutoff	77		1047.00000	939.91084	10.2%	5.5	2045s

3590735	737390	973.07022	48	20	1047.00000	940.15414	10.2%	5.5	2050s
3599508	737142	cutoff	67		1047.00000	940.39702	10.2%	5.5	2055s
3608978	736973	940.66115	45	32	1047.00000	940.66115	10.2%	5.5	2060s
3618825	736337	1010.47585	62	36	1047.00000	940.95642	10.1%	5.5	2065s
3626388	736005	1034.91595	55	41	1047.00000	941.18479	10.1%	5.5	2070s
3635469	735712	cutoff	59		1047.00000	941.43658	10.1%	5.5	2075s
3646051	735153	965.16000	51	30	1047.00000	941.75063	10.1%	5.5	2080s
3655783	734587	cutoff	55		1047.00000	942.04622	10.0%	5.5	2085s
3665137	733866	955.13830	46	33	1047.00000	942.33639	10.0%	5.5	2090s
3672882	733325	977.56827	72	37	1047.00000	942.58048	10.0%	5.5	2095s
3681401	732826	cutoff	45		1047.00000	942.82327	10.0%	5.5	2100s
3691554	732351	infeasible	62		1047.00000	943.12851	9.92%	5.5	2105s
3702633	731566	954.40820	53	30	1047.00000	943.46949	9.89%	5.5	2110s
3714605	730863	cutoff	69		1047.00000	943.83281	9.85%	5.5	2115s
3724789	730333	1040.85353	60	22	1047.00000	944.12199	9.83%	5.5	2120s
3734928	729462	1007.37250	52	31	1047.00000	944.43147	9.80%	5.5	2125s
3742494	729166	1046.21232	54	17	1047.00000	944.64824	9.78%	5.5	2130s
3752009	728310	cutoff	50		1047.00000	944.94772	9.75%	5.5	2135s
3763037	727658	970.00406	66	54	1047.00000	945.25996	9.72%	5.5	2140s
3772132	727060	1038.99774	66	30	1047.00000	945.52744	9.69%	5.5	2145s
3782147	726463	950.01697	73	21	1047.00000	945.81518	9.66%	5.5	2150s
3790802	725896	1030.31002	46	32	1047.00000	946.06153	9.64%	5.5	2155s
3799631	725089	1027.70818	65	38	1047.00000	946.33040	9.62%	5.5	2160s
3808802	724419	1042.95735	46	30	1047.00000	946.61241	9.59%	5.5	2165s
3819295	723751	cutoff	56		1047.00000	946.91298	9.56%	5.5	2170s
3827768	722805	infeasible	66		1047.00000	947.16927	9.53%	5.5	2175s
3836484	722019	cutoff	60		1047.00000	947.42464	9.51%	5.5	2180s
3847308	721083	cutoff	67		1047.00000	947.74625	9.48%	5.5	2185s
3858149	720182	1028.10527	58	44	1047.00000	948.06261	9.45%	5.5	2190s
3864876	719717	cutoff	65		1047.00000	948.25680	9.43%	5.5	2195s
3873231	718719	cutoff	58		1047.00000	948.51694	9.41%	5.5	2200s
3883630	717728	969.56427	51	36	1047.00000	948.83284	9.38%	5.5	2205s
3892121	717080	988.99508	45	30	1047.00000	949.08095	9.35%	5.5	2210s
3905142	716180	cutoff	75		1047.00000	949.43736	9.32%	5.5	2215s
3918222	714891	1034.42169	74	29	1047.00000	949.82136	9.28%	5.5	2220s
3930703	713838	cutoff	68		1047.00000	950.16694	9.25%	5.5	2225s
3941313	712780	984.05619	56	24	1047.00000	950.48301	9.22%	5.5	2230s
3950967	711813	cutoff	67		1047.00000	950.76715	9.19%	5.5	2235s
3961887	710722	cutoff	63		1047.00000	951.08452	9.16%	5.5	2240s
3972042	709720	cutoff	56		1047.00000	951.38212	9.13%	5.5	2245s
3982934	708779	1033.04752	62	17	1047.00000	951.69450	9.10%	5.5	2250s
3991591	707799	infeasible	50		1047.00000	951.94349	9.08%	5.5	2255s
4002139	706627	cutoff	63		1047.00000	952.25286	9.05%	5.5	2260s
4013602	705460	cutoff	64		1047.00000	952.56743	9.02%	5.5	2265s
4025697	704157	cutoff	63		1047.00000	952.92843	8.98%	5.5	2270s
4036385	702911	cutoff	57		1047.00000	953.23374	8.96%	5.5	2275s
4045305	702087	993.02133	67	29	1047.00000	953.48689	8.93%	5.5	2280s
4054074	700899	infeasible	72		1047.00000	953.75360	8.91%	5.5	2285s
4065549	699602	infeasible	74		1047.00000	954.08831	8.87%	5.4	2290s
4077159	698187	955.46892	57	41	1047.00000	954.42662	8.84%	5.4	2295s
4088047	696862	cutoff	62		1047.00000	954.74995	8.81%	5.4	2300s
4100242	695630	cutoff	60		1047.00000	955.09976	8.78%	5.4	2305s
4111789	694296	cutoff	64		1047.00000	955.42242	8.75%	5.4	2310s
4120565	692967	1025.83581	54	42	1047.00000	955.68880	8.72%	5.4	2315s
4133248	691485	cutoff	50		1047.00000	956.05599	8.69%	5.4	2320s
4143882	690001	cutoff	49		1047.00000	956.36712	8.66%	5.4	2325s
4153507	688665	989.68585	49	29	1047.00000	956.64380	8.63%	5.4	2330s
4163507	687321	1036.94316	41	62	1047.00000	956.91934	8.60%	5.4	2335s
4173768	686025	cutoff	52		1047.00000	957.20890	8.58%	5.4	2340s
4183404	684491	1010.53510	55	20	1047.00000	957.51490	8.55%	5.4	2345s
4194821	682840	cutoff	61		1047.00000	957.84881	8.51%	5.4	2350s
4205314	681455	cutoff	61		1047.00000	958.15383	8.49%	5.4	2355s
4215442	680069	cutoff	62		1047.00000	958.44918	8.46%	5.4	2360s
4226381	678432	997.96529	62	48	1047.00000	958.77287	8.43%	5.4	2365s
4236754	677040	cutoff	59		1047.00000	959.07998	8.40%	5.4	2370s
4247303	675237	cutoff	58		1047.00000	959.40302	8.37%	5.4	2375s
4257430	673604	cutoff	78		1047.00000	959.69742	8.34%	5.4	2380s
4267052	672076	1038.44377	69	26	1047.00000	959.99365	8.31%	5.4	2385s
4278038	670336	cutoff	75		1047.00000	960.31619	8.28%	5.4	2390s
4288115	668712	cutoff	48		1047.00000	960.62533	8.25%	5.4	2395s
4298991	667023	965.75944	56	17	1047.00000	960.94590	8.22%	5.4	2400s

4308080	665463	cutoff	57		1047.00000	961.21808	8.19%	5.4	2405s
4317664	663886	1028.86690	55	34	1047.00000	961.49744	8.17%	5.4	2410s
4326938	662226	1020.19104	59	60	1047.00000	961.78622	8.14%	5.4	2415s
4336782	660391	cutoff	58		1047.00000	962.08284	8.11%	5.4	2420s
4346193	658963	cutoff	74		1047.00000	962.34985	8.09%	5.4	2425s
4355704	657375	cutoff	53		1047.00000	962.62845	8.06%	5.4	2430s
4365871	655681	968.85935	47	30	1047.00000	962.92032	8.03%	5.4	2435s
4376085	653960	infeasible	57		1047.00000	963.23124	8.00%	5.4	2440s
4385130	652322	cutoff	86		1047.00000	963.49204	7.98%	5.4	2445s
4395361	650474	986.06180	64	46	1047.00000	963.80592	7.95%	5.4	2450s
4405199	648465	1014.55789	59	23	1047.00000	964.11317	7.92%	5.4	2455s
4415358	646648	cutoff	55		1047.00000	964.42111	7.89%	5.4	2460s
4426214	644709	cutoff	50		1047.00000	964.73138	7.86%	5.4	2465s
4436223	642702	cutoff	42		1047.00000	965.03205	7.83%	5.4	2470s
4446558	640715	cutoff	57		1047.00000	965.34412	7.80%	5.4	2475s
4455058	638984	cutoff	65		1047.00000	965.60947	7.77%	5.4	2480s
4465043	636791	cutoff	44		1047.00000	965.92400	7.74%	5.4	2485s
4474639	634712	cutoff	52		1047.00000	966.22419	7.71%	5.4	2490s
4483346	632822	cutoff	66		1047.00000	966.50172	7.69%	5.4	2495s
4493054	630718	970.91471	49	34	1047.00000	966.80020	7.66%	5.4	2500s
4503397	628385	cutoff	56		1047.00000	967.13104	7.63%	5.4	2505s
4513975	626454	cutoff	56		1047.00000	967.43867	7.60%	5.4	2510s
4523914	624289	985.64641	55	36	1047.00000	967.75084	7.57%	5.4	2515s
4533477	622296	infeasible	68		1047.00000	968.02482	7.54%	5.4	2520s
4543702	620147	977.08283	62	34	1047.00000	968.33835	7.51%	5.4	2525s
4554029	617828	981.85322	66	41	1047.00000	968.66202	7.48%	5.4	2530s
4563017	615719	1016.39547	75	30	1047.00000	968.94555	7.46%	5.4	2535s
4574332	613207	976.07572	58	52	1047.00000	969.29276	7.42%	5.4	2540s
4584048	611021	980.92431	58	40	1047.00000	969.58236	7.39%	5.4	2545s
4592576	609135	992.80572	62	25	1047.00000	969.84427	7.37%	5.4	2550s
4601460	607022	cutoff	50		1047.00000	970.12761	7.34%	5.4	2555s
4611488	604733	cutoff	53		1047.00000	970.43968	7.31%	5.4	2560s
4621569	602270	cutoff	54		1047.00000	970.74731	7.28%	5.4	2565s
4631174	599983	cutoff	69		1047.00000	971.04263	7.25%	5.4	2570s
4640415	597757	cutoff	48		1047.00000	971.32013	7.23%	5.4	2575s
4650806	595197	infeasible	70		1047.00000	971.64790	7.20%	5.4	2580s
4659942	593085	985.52594	60	45	1047.00000	971.92129	7.17%	5.4	2585s
4668970	591058	984.23679	60	28	1047.00000	972.18844	7.15%	5.4	2590s
4679200	588654	972.53184	55	38	1047.00000	972.50226	7.12%	5.4	2595s
4688025	586603	cutoff	65		1047.00000	972.77174	7.09%	5.4	2600s
4695778	584469	cutoff	50		1047.00000	973.03105	7.06%	5.4	2605s
4706346	581704	973.64137	51	25	1047.00000	973.37471	7.03%	5.4	2610s
4716776	579067	cutoff	67		1047.00000	973.69676	7.00%	5.4	2615s
4725364	576782	cutoff	73		1047.00000	973.97365	6.97%	5.4	2620s
4735950	573907	1003.52818	49	42	1047.00000	974.32087	6.94%	5.4	2625s
4745414	571365	cutoff	49		1047.00000	974.63451	6.91%	5.4	2630s
4755287	568662	1010.72524	67	42	1047.00000	974.95610	6.88%	5.4	2635s
4764634	566010	cutoff	65		1047.00000	975.27189	6.85%	5.4	2640s
4773699	563543	cutoff	62		1047.00000	975.56386	6.82%	5.4	2645s
4783912	560566	998.41728	68	45	1047.00000	975.90093	6.79%	5.4	2650s
4794035	557926	cutoff	54		1047.00000	976.22793	6.76%	5.4	2655s
4804612	554858	1037.09839	57	45	1047.00000	976.58581	6.73%	5.4	2660s
4813953	552020	cutoff	48		1047.00000	976.90797	6.69%	5.4	2665s
4824053	549042	991.87582	65	37	1047.00000	977.25384	6.66%	5.4	2670s
4832529	546429	cutoff	56		1047.00000	977.53898	6.63%	5.4	2675s
4840431	544095	cutoff	52		1047.00000	977.80321	6.61%	5.4	2680s
4850307	541107	cutoff	60		1047.00000	978.14241	6.58%	5.4	2685s
4860377	538182	cutoff	87		1047.00000	978.47285	6.55%	5.3	2690s
4870061	535262	cutoff	63		1047.00000	978.80921	6.51%	5.3	2695s
4880490	532102	cutoff	64		1047.00000	979.16653	6.48%	5.3	2700s
4890193	529144	cutoff	60		1047.00000	979.48883	6.45%	5.3	2705s
4900570	525838	cutoff	63		1047.00000	979.85538	6.41%	5.3	2710s
4909389	522939	cutoff	63		1047.00000	980.16937	6.38%	5.3	2715s
4917709	520214	cutoff	54		1047.00000	980.45846	6.36%	5.3	2720s
4928393	516514	cutoff	72		1047.00000	980.85310	6.32%	5.3	2725s
4937068	513614	infeasible	54		1047.00000	981.15685	6.29%	5.3	2730s
4946227	510684	infeasible	68		1047.00000	981.47707	6.26%	5.3	2735s
4956783	507354	cutoff	64		1047.00000	981.83388	6.22%	5.3	2740s
4965992	504255	1037.76099	55	30	1047.00000	982.15806	6.19%	5.3	2745s
4976201	500808	1033.18979	54	17	1047.00000	982.53816	6.16%	5.3	2750s
4984584	497844	cutoff	53		1047.00000	982.83638	6.13%	5.3	2755s

4994969	494138	cutoff	69		1047.00000	983.21053	6.09%	5.3	2760s
5006682	490008	cutoff	53		1047.00000	983.63433	6.05%	5.3	2765s
5014749	487076	1008.46524	49	28	1047.00000	983.94132	6.02%	5.3	2770s
5026012	482980	cutoff	53		1047.00000	984.36554	5.98%	5.3	2775s
5036753	479042	cutoff	49		1047.00000	984.76124	5.94%	5.3	2780s
5047395	475177	cutoff	64		1047.00000	985.16722	5.91%	5.3	2785s
5058036	471023	1028.03216	81	36	1047.00000	985.58451	5.87%	5.3	2790s
5068820	467180	987.38848	68	31	1047.00000	985.98717	5.83%	5.3	2795s
5076963	463986	992.86791	81	29	1047.00000	986.29200	5.80%	5.3	2800s
5087829	459846	1016.79032	90	24	1047.00000	986.69337	5.76%	5.3	2805s
5097535	456153	1028.34401	67	29	1047.00000	987.06806	5.72%	5.3	2810s
5107411	452204	cutoff	81		1047.00000	987.45622	5.69%	5.3	2815s
5117269	448075	cutoff	57		1047.00000	987.85727	5.65%	5.3	2820s
5127108	444220	1031.92537	64	39	1047.00000	988.24323	5.61%	5.3	2825s
5136169	440548	1024.26573	51	35	1047.00000	988.61148	5.58%	5.3	2830s
5142937	437685	infeasible	79		1047.00000	988.88595	5.55%	5.3	2835s
5152047	433806	cutoff	72		1047.00000	989.26205	5.51%	5.3	2840s
5160729	429979	1024.37694	75	24	1047.00000	989.63051	5.48%	5.3	2845s
5169961	426120	cutoff	70		1047.00000	990.01135	5.44%	5.3	2850s
5178162	422548	1025.01938	50	22	1047.00000	990.35483	5.41%	5.3	2855s
5186973	418766	cutoff	72		1047.00000	990.71673	5.38%	5.3	2860s
5196862	414398	cutoff	48		1047.00000	991.13818	5.34%	5.3	2865s
5205801	410428	1040.23827	66	38	1047.00000	991.51814	5.30%	5.3	2870s
5214804	406388	cutoff	67		1047.00000	991.91770	5.26%	5.3	2875s
5223433	402588	cutoff	47		1047.00000	992.28357	5.23%	5.3	2880s
5235106	397117	cutoff	65		1047.00000	992.80228	5.18%	5.3	2885s
5244182	392984	cutoff	53		1047.00000	993.19225	5.14%	5.3	2890s
5253642	388556	cutoff	53		1047.00000	993.61627	5.10%	5.3	2895s
5262884	384324	1029.24998	62	31	1047.00000	994.02592	5.06%	5.3	2900s
5272515	379696	cutoff	65		1047.00000	994.46668	5.02%	5.3	2905s
5282922	374898	cutoff	49		1047.00000	994.91911	4.97%	5.3	2910s
5290135	371330	1014.20802	67	34	1047.00000	995.26135	4.94%	5.3	2915s
5300444	366336	cutoff	51		1047.00000	995.74412	4.90%	5.3	2920s
5310150	361709	cutoff	60		1047.00000	996.18800	4.85%	5.3	2925s
5319276	357153	996.61643	46	32	1047.00000	996.61643	4.81%	5.3	2930s
5329372	352125	cutoff	54		1047.00000	997.09696	4.77%	5.3	2935s
5338315	347433	cutoff	60		1047.00000	997.53760	4.72%	5.3	2940s
5348631	342266	cutoff	68		1047.00000	998.03793	4.68%	5.3	2945s
5358807	336865	999.46853	48	34	1047.00000	998.55183	4.63%	5.3	2950s
5367064	332569	cutoff	57		1047.00000	998.95089	4.59%	5.3	2955s
5376719	327442	cutoff	49		1047.00000	999.43685	4.54%	5.3	2960s
5386791	322117	cutoff	66		1047.00000	999.94979	4.49%	5.3	2965s
5397505	316018	cutoff	66		1047.00000	1000.52514	4.44%	5.2	2970s
5408615	309723	infeasible	52		1047.00000	1001.14304	4.38%	5.2	2975s
5417434	304584	cutoff	78		1047.00000	1001.63526	4.33%	5.2	2980s
5426816	299166	1045.90212	68	17	1047.00000	1002.14987	4.28%	5.2	2985s
5436565	293670	cutoff	60		1047.00000	1002.68980	4.23%	5.2	2990s
5446659	287633	cutoff	76		1047.00000	1003.27301	4.18%	5.2	2995s
5455107	282566	cutoff	74		1047.00000	1003.77167	4.13%	5.2	3000s
5464284	276977	cutoff	56		1047.00000	1004.32100	4.08%	5.2	3005s
5473599	271229	infeasible	71		1047.00000	1004.89886	4.02%	5.2	3010s
5483078	265479	infeasible	49		1047.00000	1005.46276	3.97%	5.2	3015s
5491843	259928	cutoff	54		1047.00000	1006.00592	3.92%	5.2	3020s
5501853	253575	cutoff	55		1047.00000	1006.65915	3.85%	5.2	3025s
5511530	247408	1024.27253	58	31	1047.00000	1007.28909	3.79%	5.2	3030s
5520464	241641	1034.70740	70	41	1047.00000	1007.87524	3.74%	5.2	3035s
5529225	235842	1029.26002	51	35	1047.00000	1008.48174	3.68%	5.2	3040s
5541210	227869	infeasible	66		1047.00000	1009.31892	3.60%	5.2	3045s
5553325	219405	cutoff	54		1047.00000	1010.21668	3.51%	5.2	3050s
5561985	213378	cutoff	62		1047.00000	1010.86484	3.45%	5.2	3055s
5574109	204946	infeasible	49		1047.00000	1011.80656	3.36%	5.2	3060s
5583772	197863	cutoff	76		1047.00000	1012.58466	3.29%	5.2	3065s
5592441	191638	cutoff	75		1047.00000	1013.26595	3.22%	5.2	3070s
5601275	185060	cutoff	56		1047.00000	1014.01055	3.15%	5.2	3075s
5608791	179473	cutoff	62		1047.00000	1014.65645	3.09%	5.2	3080s
5617941	172477	cutoff	50		1047.00000	1015.46047	3.01%	5.2	3085s
5627142	165481	cutoff	65		1047.00000	1016.29553	2.93%	5.2	3090s
5636722	158061	cutoff	52		1047.00000	1017.20132	2.85%	5.2	3095s
5647254	149464	cutoff	55		1047.00000	1018.28781	2.74%	5.2	3100s
5657815	140861	cutoff	79		1047.00000	1019.39220	2.64%	5.2	3105s
5667499	132996	infeasible	50		1047.00000	1020.44003	2.54%	5.2	3110s

5677526	124622	1030.72528	59	30	1047.00000	1021.58148	2.43%	5.2	3115s
5687444	116087	cutoff	77		1047.00000	1022.79923	2.31%	5.1	3120s
5697317	107597	cutoff	53		1047.00000	1024.04790	2.19%	5.1	3125s
5707375	98705	infeasible	81		1047.00000	1025.43431	2.06%	5.1	3130s
5717564	89758	1043.11668	47	36	1047.00000	1026.87769	1.92%	5.1	3135s
5728255	80095	cutoff	59		1047.00000	1028.49091	1.77%	5.1	3140s
5739473	69790	cutoff	83		1047.00000	1030.29631	1.60%	5.1	3145s
5749929	60142	cutoff	59		1047.00000	1032.14729	1.42%	5.1	3150s
5760205	50338	cutoff	45		1047.00000	1034.09611	1.23%	5.1	3155s
5770839	40218	cutoff	43		1047.00000	1036.27055	1.02%	5.1	3160s
5780200	31146	cutoff	76		1047.00000	1038.33585	0.83%	5.1	3165s
5792736	18848	cutoff	44		1047.00000	1041.36562	0.54%	5.1	3170s
5806710	4994	infeasible	84		1047.00000	1045.07137	0.18%	5.1	3175s

Cutting planes:

Gomory: 14

MIR: 14

Flow cover: 4

Explored 5811796 nodes (29451624 simplex iterations) in 3177.03 seconds

Thread count was 4 (of 64 available processors)

Optimal solution found (tolerance 1.00e-04)

Best objective 1.047000000000e+03, best bound 1.047000000000e+03, gap 0.0%

Optimize a model with 2228 rows, 1719 columns and 19014 nonzeros

Coefficient statistics:

Matrix range [1e+00, 1e+08]

Objective range [1e+00, 1e+00]

Bounds range [1e+00, 1e+00]

RHS range [1e+00, 2e+03]

Iteration	Objective	Primal Inf.	Dual Inf.	Time
0	handle free variables			0s
24	1.0470000e+03	0.000000e+00	0.000000e+00	0s

Solved in 24 iterations and 0.00 seconds

Optimal objective 1.047000000e+03

Gurobi 6.5.0: optimal solution; objective 1047

29451624 simplex iterations

5811796 branch-and-cut nodes

plus 24 simplex iterations for intbasis

: BX LX DX :=

12	2	1	.	.
13	2	1	.	.
36	3	1	.	.
41	1	1	.	.
163	1	.	0	1
163	3	.	1	0
175	1	.	0	1
183	3	.	1	0
184	1	.	0	1
184	3	.	1	0
187	2	.	1	0
192	2	.	1	0
221	3	.	0	1
233	1	.	1	0
260	1	.	1	0
260	2	.	0	1
261	1	.	1	0
261	3	.	0	1
267	2	.	0	1

;

:	BY	LY	DY	:=
'Chik Fi La'	1	1	0	0
'Chik Fi La'	3	1	0	0
McDonalds	2	1	0	0
'Salad Works'	1	0	0	1
'Salad Works'	2	0	1	0
'Salad Works'	3	0	1	0
Wendys	1	0	1	0
Wendys	2	0	0	1

```
Wendys      3    0    0    1
;
```

```
nutrSlack :=
```

```
Calories 1  -140
Calories 2  -330
Calories 3  -260
Carbsg  1   -8
Carbsg  2   -3
Carbsg  3  -19
Chlmg   1  -105
Chlmg   2   -15
Chlmg   3    -5
Fatg    1    -4
Fiberg  2    -2
Fiberg  3    -1
ProteinG 1  -16
ProteinG 2  -32
ProteinG 3  -24
Sodmg   1  -25
Sugarg  1  -14
Sugarg  2  -11
Sugarg  3  -24
;
```

```
sum{b in breakfastFoods, t in days} bcost[b]*BX[b,t] + sum{l in lunchFoods,
  t in days} lcost[l]*LX[l,t] + sum{d in dinnerFoods, t in days} dcost[d]*DX[d
,t] = 84.79
```

```
0.01*(sum{r in restaurants, t in days} (BY[r,t] + LY[r,t] + DY[r,t])) = 0.09
```

```
sum{n in nutrients, t in days} nutrSlackVar[n,t] = 1038
```

```
sum{b in breakfastFoods} bcost[b]*BX[b,1] + sum{l in lunchFoods} lcost[l]*LX[
l,1] + sum{d in dinnerFoods} dcost[d]*DX[d,1] = 31.79
```

```
sum{b in breakfastFoods} bcost[b]*BX[b,2] + sum{l in lunchFoods} lcost[l]*LX[
l,2] + sum{d in dinnerFoods} dcost[d]*DX[d,2] = 22.76
```

```
sum{b in breakfastFoods} bcost[b]*BX[b,3] + sum{l in lunchFoods} lcost[l]*LX[
l,3] + sum{d in dinnerFoods} dcost[d]*DX[d,3] = 30.24
```

```
sum{b in breakfastFoods, t in days} bcost[b]*BX[b,t] + sum{l in lunchFoods,
  t in days} lcost[l]*LX[l,t] + sum{d in dinnerFoods, t in days} dcost[d]*DX[d
,t] = 84.79
```

```
sum{b in breakfastFoods} bnutr[b,'Calories']*BX[b,1] + sum{l in lunchFoods}
lnutr[l,'Calories']*LX[l,1] + sum{d in dinnerFoods} dnutr[d,'Calories']*DX[
d,1] = 2260
```

```
sum{b in breakfastFoods} bnutr[b,'Calories']*BX[b,2] + sum{l in lunchFoods}
lnutr[l,'Calories']*LX[l,2] + sum{d in dinnerFoods} dnutr[d,'Calories']*DX[
d,2] = 2070
```

```
sum{b in breakfastFoods} bnutr[b,'Calories']*BX[b,3] + sum{l in lunchFoods}
lnutr[l,'Calories']*LX[l,3] + sum{d in dinnerFoods} dnutr[d,'Calories']*DX[
d,3] = 2140
```