



\*\*\*\*\*

NEOS Server Version 5.0

Disclaimer:

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 4356788 has finished.

File exists

You are using the solver gurobi\_ampl.

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

budget variety 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 14289 constraints and 6 variables.

Adjusted problem:

1719 variables:

1671 binary variables

48 linear variables

1702 constraints, all linear; 19002 nonzeros

24 equality constraints

1678 inequality constraints

1 linear objective; 114 nonzeros.

Gurobi 6.5.0: threads=4

outlev=1

Optimize a model with 1702 rows, 1719 columns and 19002 nonzeros

Coefficient statistics:

Matrix range [9e-01, 1e+08]

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

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

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

Presolve removed 286 rows and 301 columns

Presolve time: 0.12s

Presolved: 1416 rows, 1418 columns, 16116 nonzeros

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

Found heuristic solution: objective 10856.500000

Found heuristic solution: objective 8739.000000

Found heuristic solution: objective 6255.000000

Root relaxation: objective 1.972346e+02, 2320 iterations, 0.08 seconds

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

	0	0	197.23462	0	42	6255.00000	197.23462	96.8%	-	0s
H	0	0				1260.000000	197.23462	84.3%	-	0s
	0	0	310.78223	0	61	1260.00000	310.78223	75.3%	-	0s
	0	0	329.20726	0	66	1260.00000	329.20726	73.9%	-	0s
	0	0	331.28496	0	76	1260.00000	331.28496	73.7%	-	0s
	0	0	333.80842	0	84	1260.00000	333.80842	73.5%	-	1s
	0	0	334.04486	0	85	1260.00000	334.04486	73.5%	-	1s
	0	0	334.16721	0	85	1260.00000	334.16721	73.5%	-	1s
	0	0	334.16721	0	75	1260.00000	334.16721	73.5%	-	1s
	0	2	334.16721	0	75	1260.00000	334.16721	73.5%	-	1s
H	33	32				1201.000000	343.11246	71.4%	11.2	1s
H	1844	1631				1170.000000	345.92618	70.4%	4.2	5s
H	1844	1549				1149.000000	345.92618	69.9%	4.2	5s
H	1858	1480				1073.000000	376.87273	64.9%	4.2	10s
	1870	1488	574.53366	218	98	1073.00000	391.84760	63.5%	4.1	15s
H	1871	1414				1053.000000	391.84760	62.8%	4.1	16s
H	2274	1486				1012.000000	391.84760	61.3%	5.7	17s
H	2276	1412				980.000000	391.84760	60.0%	5.7	17s
	5909	2915	662.26511	53	20	980.00000	398.06925	59.4%	5.4	20s
H11684	6626					926.000000	409.71837	55.8%	5.2	23s
	14795	9153	infeasible	112		926.00000	414.69366	55.2%	5.2	25s
	21665	14354	589.77069	36	75	926.00000	425.61259	54.0%	5.1	52s
	21671	14358	683.05354	71	74	926.00000	425.61259	54.0%	5.1	55s
	21677	14362	753.19206	72	90	926.00000	425.61259	54.0%	5.1	60s
	21682	14365	529.88738	38	88	926.00000	425.61259	54.0%	5.1	65s
	21688	14369	451.59142	24	89	926.00000	425.61259	54.0%	5.1	71s
	21692	14372	650.40233	66	92	926.00000	425.61259	54.0%	5.1	75s
	21699	14377	529.26920	30	89	926.00000	425.61259	54.0%	5.1	80s
	21704	14380	703.67077	52	91	926.00000	425.61259	54.0%	5.1	85s
	21711	14385	683.05354	71	98	926.00000	425.61259	54.0%	5.1	90s
	21717	14389	753.19206	72	107	926.00000	425.61259	54.0%	5.1	95s
	21721	14391	842.15936	89	110	926.00000	426.16548	54.0%	5.1	100s
	22106	14474	524.33876	104	41	926.00000	426.16548	54.0%	5.3	105s
	28708	17002	469.49607	44	66	926.00000	426.16548	54.0%	5.0	110s
*39823	19643			105		865.000000	440.34657	49.1%	4.8	114s
	40516	19798	806.98424	94	39	865.00000	440.81065	49.0%	4.8	116s
	48201	22222	739.16509	39	55	865.00000	459.61396	46.9%	4.8	120s
	57142	24760	501.30890	64	45	865.00000	473.13838	45.3%	4.8	125s
	65494	27880	cutoff	66		865.00000	485.69375	43.9%	4.8	130s
	73047	32341	576.23859	61	68	865.00000	494.84429	42.8%	4.8	135s
	78357	35417	cutoff	59		865.00000	501.44890	42.0%	4.8	140s
	84986	39228	804.32427	81	47	865.00000	508.60884	41.2%	4.8	145s
	89577	41695	infeasible	62		865.00000	514.03925	40.6%	4.9	150s
	94937	44678	719.04661	68	64	865.00000	517.87603	40.1%	4.9	155s
	99355	47133	710.76740	57	54	865.00000	521.61321	39.7%	4.8	160s
	105577	50453	547.09903	53	83	865.00000	526.89536	39.1%	4.8	165s
	110315	53020	588.97790	58	65	865.00000	529.68733	38.8%	4.8	170s
	115666	55857	837.11957	51	69	865.00000	533.49842	38.3%	4.8	175s
	120880	58664	828.54770	59	55	865.00000	536.95949	37.9%	4.8	180s
	128036	62534	cutoff	61		865.00000	541.61337	37.4%	4.8	185s
	133078	65050	cutoff	50		865.00000	544.89029	37.0%	4.8	190s
	139625	68478	612.84829	52	67	865.00000	548.28080	36.6%	4.8	195s
	146795	72083	cutoff	53		865.00000	552.62500	36.1%	4.8	201s
	149131	73218	666.17269	76	63	865.00000	553.96364	36.0%	4.8	206s
	154930	76265	694.55215	82	49	865.00000	556.56565	35.7%	4.8	210s
	160181	78886	cutoff	50		865.00000	559.10663	35.4%	4.8	215s
	167196	82399	564.86845	44	63	865.00000	562.29026	35.0%	4.8	220s
	172080	84866	850.30390	63	58	865.00000	564.43870	34.7%	4.8	225s
	179019	88233	cutoff	77		865.00000	567.33412	34.4%	4.8	230s
	184492	90816	754.42192	60	59	865.00000	569.56556	34.2%	4.8	235s
	190155	93814	822.11540	49	68	865.00000	571.44489	33.9%	4.8	240s
	195408	96431	cutoff	60		865.00000	573.14981	33.7%	4.8	245s
	199502	98496	806.53914	96	9	865.00000	574.76978	33.6%	4.8	250s
	205383	101310	793.25652	67	42	865.00000	576.69717	33.3%	4.8	255s
	210495	103803	846.55938	116	59	865.00000	578.22982	33.2%	4.8	260s
	215871	106329	674.72871	66	42	865.00000	580.00771	32.9%	4.8	265s
	221763	109304	834.12306	90	47	865.00000	581.70786	32.8%	4.8	270s
	226395	111547	cutoff	55		865.00000	583.04964	32.6%	4.8	275s
	233202	114827	cutoff	58		865.00000	585.18660	32.3%	4.8	280s
	239678	117873	712.09836	56	57	865.00000	587.08603	32.1%	4.8	285s

245740	120747	695.10130	68	57	865.00000	588.76083	31.9%	4.8	290s
251887	123536	cutoff	53		865.00000	590.34497	31.8%	4.8	295s
255807	125333	770.81759	62	59	865.00000	591.30718	31.6%	4.8	300s
262420	128441	604.23811	56	77	865.00000	593.05750	31.4%	4.8	305s
267843	130998	703.10395	73	47	865.00000	594.49675	31.3%	4.8	310s
274100	134029	807.13192	73	53	865.00000	595.88601	31.1%	4.8	315s
278571	136036	829.15043	54	55	865.00000	596.92354	31.0%	4.8	320s
284687	138934	808.66763	54	76	865.00000	598.46518	30.8%	4.8	325s
289290	140966	854.14294	56	50	865.00000	599.55466	30.7%	4.8	330s
295055	143588	601.68977	47	77	865.00000	600.85672	30.5%	4.8	335s
300425	145877	801.83104	51	63	865.00000	601.89230	30.4%	4.8	340s
305609	148064	cutoff	68		865.00000	602.99024	30.3%	4.8	345s
*311073	148703		84		857.0000000	604.18424	29.5%	4.7	349s
311159	148774	infeasible	70		857.00000	604.21089	29.5%	4.7	350s
316277	151098	798.26817	86	47	857.00000	605.40326	29.4%	4.8	355s
321183	153090	809.36594	64	61	857.00000	606.52566	29.2%	4.7	360s
326893	155359	cutoff	63		857.00000	607.93851	29.1%	4.7	365s
332659	157788	723.24359	61	61	857.00000	609.09770	28.9%	4.7	370s
338090	160079	804.22831	51	42	857.00000	610.27368	28.8%	4.7	375s
342310	161848	cutoff	103		857.00000	611.18140	28.7%	4.7	380s
348185	164180	815.62982	58	64	857.00000	612.48938	28.5%	4.7	385s
352849	166044	798.39937	73	42	857.00000	613.35340	28.4%	4.7	390s
359171	168631	840.76713	99	47	857.00000	614.54740	28.3%	4.7	395s
363828	170491	788.66981	60	46	857.00000	615.42658	28.2%	4.7	400s
369121	172684	infeasible	74		857.00000	616.52052	28.1%	4.7	405s
375002	175219	801.01781	64	56	857.00000	617.54246	27.9%	4.7	410s
380031	177200	822.40869	60	74	857.00000	618.42210	27.8%	4.7	415s
385699	179535	638.62047	52	52	857.00000	619.36224	27.7%	4.7	420s
390069	181300	784.26125	56	65	857.00000	620.13417	27.6%	4.7	425s
395812	183652	650.79363	61	59	857.00000	621.06738	27.5%	4.7	430s
401225	185881	740.61957	81	75	857.00000	621.93304	27.4%	4.7	435s
407070	188114	776.22059	62	59	857.00000	622.84490	27.3%	4.7	440s
412333	190397	754.96874	82	68	857.00000	623.61893	27.2%	4.7	445s
417891	192683	cutoff	63		857.00000	624.44891	27.1%	4.7	450s
423216	194628	722.29175	58	42	857.00000	625.28086	27.0%	4.7	455s
429194	196900	731.97145	68	38	857.00000	626.32314	26.9%	4.7	460s
433404	198521	634.13539	62	77	857.00000	626.99386	26.8%	4.7	465s
439514	200806	cutoff	86		857.00000	627.81588	26.7%	4.7	470s
444887	202856	641.28850	85	52	857.00000	628.55679	26.7%	4.7	475s
451490	205447	780.81890	83	50	857.00000	629.48165	26.5%	4.7	480s
456889	207639	826.32643	64	63	857.00000	630.30385	26.5%	4.7	485s
461262	209249	822.24624	55	65	857.00000	630.96072	26.4%	4.7	490s
466386	211385	721.89144	64	75	857.00000	631.56977	26.3%	4.7	495s
472768	214037	808.88439	64	55	857.00000	632.39638	26.2%	4.7	500s
477529	215978	762.78884	55	59	857.00000	633.04989	26.1%	4.7	505s
484063	218645	cutoff	46		857.00000	633.84459	26.0%	4.7	510s
489102	220668	709.65035	69	66	857.00000	634.46714	26.0%	4.7	515s
494020	222519	822.12553	81	59	857.00000	635.07324	25.9%	4.7	520s
497883	224096	729.67873	55	76	857.00000	635.53447	25.8%	4.7	525s
503639	226271	773.58204	58	77	857.00000	636.29739	25.8%	4.7	530s
508607	228151	652.53510	44	52	857.00000	636.84943	25.7%	4.7	535s
512163	229597	718.78747	57	51	857.00000	637.22786	25.6%	4.7	540s
517355	231577	797.88105	72	53	857.00000	637.84058	25.6%	4.7	545s
*519052	209649		76		825.0000000	637.95312	22.7%	4.7	546s
523108	210904	794.85744	77	64	825.00000	638.50112	22.6%	4.7	550s
526981	211898	cutoff	65		825.00000	639.13337	22.5%	4.7	555s
532230	213500	790.94967	58	57	825.00000	639.80393	22.4%	4.7	560s
537703	215183	755.83742	50	59	825.00000	640.56415	22.4%	4.7	565s
543321	216824	infeasible	101		825.00000	641.40837	22.3%	4.7	570s
548380	218408	infeasible	74		825.00000	642.07885	22.2%	4.7	575s
554668	220341	695.43252	55	80	825.00000	642.92144	22.1%	4.7	580s
559250	221694	795.30636	88	62	825.00000	643.51486	22.0%	4.7	585s
564417	223362	824.11957	47	67	825.00000	644.14892	21.9%	4.7	590s
569074	224830	infeasible	99		825.00000	644.75672	21.8%	4.7	595s
573744	226268	809.67658	76	42	825.00000	645.33472	21.8%	4.7	600s
578650	227833	708.18379	59	55	825.00000	645.85740	21.7%	4.7	605s
584356	229553	749.01710	88	34	825.00000	646.52671	21.6%	4.7	610s
587856	230639	767.60569	78	8	825.00000	646.97102	21.6%	4.7	615s
592234	231715	688.17071	69	45	825.00000	647.48283	21.5%	4.7	620s
598339	233659	672.43869	76	70	825.00000	648.22912	21.4%	4.7	625s
603732	235214	783.05489	58	62	825.00000	648.87695	21.3%	4.7	630s

608659	236655	cutoff	61		825.00000	649.40761	21.3%	4.7	635s
613239	237698	800.85624	70	56	825.00000	649.97466	21.2%	4.7	640s
619317	239449	720.55494	54	43	825.00000	650.58164	21.1%	4.7	645s
623133	240497	cutoff	52		825.00000	651.02547	21.1%	4.7	650s
628498	242074	cutoff	58		825.00000	651.55406	21.0%	4.7	655s
633279	243449	713.36969	91	43	825.00000	652.08113	21.0%	4.7	660s
637776	244567	785.07476	77	51	825.00000	652.57514	20.9%	4.7	665s
642774	246088	cutoff	78		825.00000	653.07498	20.8%	4.7	670s
646935	247182	791.06447	67	43	825.00000	653.50739	20.8%	4.7	675s
651639	248399	cutoff	64		825.00000	653.96753	20.7%	4.7	680s
656645	249843	806.27070	66	45	825.00000	654.50359	20.7%	4.8	685s
661289	251149	772.86801	87	60	825.00000	654.97570	20.6%	4.8	690s
666174	252264	734.17532	62	61	825.00000	655.44900	20.6%	4.8	695s
671606	253731	697.09051	55	49	825.00000	655.93241	20.5%	4.8	700s
675354	254772	685.42538	66	46	825.00000	656.35399	20.4%	4.8	705s
680157	256098	743.00328	57	57	825.00000	656.85075	20.4%	4.8	710s
684870	257610	721.93007	73	55	825.00000	657.27993	20.3%	4.8	715s
690083	259071	786.48739	62	64	825.00000	657.80607	20.3%	4.8	720s
693869	260008	782.61860	66	52	825.00000	658.16811	20.2%	4.8	725s
699688	261533	767.85937	68	45	825.00000	658.69191	20.2%	4.8	730s
704395	262865	779.06624	62	44	825.00000	659.17983	20.1%	4.8	735s
709206	264100	706.71261	70	42	825.00000	659.61957	20.0%	4.8	740s
714408	265550	821.22704	67	42	825.00000	660.11957	20.0%	4.8	745s
719981	266945	753.42366	57	53	825.00000	660.63767	19.9%	4.8	750s
724043	267955	682.24767	62	43	825.00000	661.04695	19.9%	4.8	755s
730258	269670	cutoff	65		825.00000	661.58718	19.8%	4.8	760s
734605	270979	790.86199	65	50	825.00000	661.93240	19.8%	4.8	765s
739350	272204	infeasible	47		825.00000	662.33564	19.7%	4.8	770s
743291	273027	811.44550	58	80	825.00000	662.71354	19.7%	4.8	775s
748109	274328	705.84100	74	53	825.00000	663.13361	19.6%	4.8	780s
753221	275617	778.85478	57	49	825.00000	663.59384	19.6%	4.8	785s
758082	276975	cutoff	57		825.00000	663.98904	19.5%	4.8	790s
763441	278446	758.53817	67	73	825.00000	664.48058	19.5%	4.8	795s
767891	279519	781.37672	61	43	825.00000	664.86261	19.4%	4.8	800s
773385	280987	cutoff	67		825.00000	665.34160	19.4%	4.8	805s
778025	282164	788.73477	78	42	825.00000	665.75309	19.3%	4.8	810s
781676	283044	762.96604	77	40	825.00000	666.06882	19.3%	4.8	815s
786688	284270	737.29381	80	42	825.00000	666.52258	19.2%	4.8	820s
790435	285273	719.94396	60	56	825.00000	666.82232	19.2%	4.8	825s
795389	286513	822.53556	65	50	825.00000	667.22936	19.1%	4.8	830s
799473	287589	746.99769	53	49	825.00000	667.51575	19.1%	4.8	835s
805499	289146	768.89762	81	64	825.00000	667.98448	19.0%	4.8	840s
809906	290198	cutoff	62		825.00000	668.35806	19.0%	4.8	845s
813786	291080	698.21204	69	53	825.00000	668.67532	18.9%	4.8	850s
817853	292085	780.44033	66	51	825.00000	669.01323	18.9%	4.8	855s
822650	293266	793.77311	60	51	825.00000	669.35632	18.9%	4.8	860s
828044	294516	824.40201	85	54	825.00000	669.82999	18.8%	4.8	865s
833610	295922	691.69029	71	64	825.00000	670.25561	18.8%	4.8	870s
838110	296876	819.07176	58	42	825.00000	670.65120	18.7%	4.8	875s
843096	298100	cutoff	52		825.00000	671.01754	18.7%	4.8	880s
847603	299131	cutoff	71		825.00000	671.37997	18.6%	4.8	885s
852176	300201	706.62063	57	57	825.00000	671.74881	18.6%	4.8	890s
857673	301410	762.30972	63	25	825.00000	672.18556	18.5%	4.8	895s
862322	302547	cutoff	78		825.00000	672.53344	18.5%	4.8	900s
866977	303641	cutoff	72		825.00000	672.89047	18.4%	4.8	905s
871693	304884	cutoff	52		825.00000	673.24721	18.4%	4.8	910s
878030	306313	812.86310	63	42	825.00000	673.69690	18.3%	4.8	915s
881887	307354	cutoff	55		825.00000	673.97341	18.3%	4.8	920s
889176	309139	712.69739	64	71	825.00000	674.44621	18.2%	4.8	925s
893493	310225	774.52046	87	63	825.00000	674.75468	18.2%	4.8	930s
898641	311423	cutoff	65		825.00000	675.09898	18.2%	4.8	935s
903580	312602	infeasible	58		825.00000	675.45059	18.1%	4.8	940s
907735	313504	811.49251	72	44	825.00000	675.76314	18.1%	4.8	945s
912342	314450	676.09389	78	39	825.00000	676.09389	18.0%	4.8	950s
918256	315803	745.06805	65	18	825.00000	676.53440	18.0%	4.8	955s
923649	317073	718.33879	66	42	825.00000	676.88547	18.0%	4.8	960s
929094	318263	infeasible	84		825.00000	677.22540	17.9%	4.8	965s
934051	319336	809.26478	90	60	825.00000	677.60595	17.9%	4.9	970s
940065	320843	824.34945	65	49	825.00000	677.96221	17.8%	4.9	975s
943564	321493	728.26883	73	50	825.00000	678.22207	17.8%	4.9	980s
948811	322581	748.86060	87	61	825.00000	678.57189	17.7%	4.9	985s

954779	324010	802.69780	53	75	825.00000	678.96701	17.7%	4.9	990s
960109	325092	731.44956	64	60	825.00000	679.33650	17.7%	4.9	995s
964195	325922	cutoff	87		825.00000	679.65132	17.6%	4.9	1000s
968902	326859	cutoff	50		825.00000	679.96302	17.6%	4.9	1005s
973773	327880	811.07909	52	54	825.00000	680.26279	17.5%	4.9	1010s
979083	328967	cutoff	55		825.00000	680.65792	17.5%	4.9	1015s
985240	330493	690.91322	51	63	825.00000	681.04095	17.4%	4.9	1020s
989299	331491	760.48860	73	42	825.00000	681.27345	17.4%	4.9	1025s
994260	332544	708.39232	53	45	825.00000	681.59962	17.4%	4.9	1030s
998076	333457	707.15084	64	48	825.00000	681.84914	17.4%	4.9	1035s
1003858	334887	725.74774	67	64	825.00000	682.17583	17.3%	4.9	1040s
1009346	336204	infeasible	72		825.00000	682.48169	17.3%	4.9	1045s
1014550	337329	744.20254	65	62	825.00000	682.82490	17.2%	4.9	1050s
1019065	338283	789.33592	65	42	825.00000	683.08289	17.2%	4.9	1055s
1025917	339805	cutoff	69		825.00000	683.50357	17.2%	4.9	1060s
1030477	340622	721.03300	52	46	825.00000	683.83105	17.1%	4.9	1065s
1036985	342116	731.09463	59	51	825.00000	684.26016	17.1%	4.9	1070s
1042717	343361	cutoff	83		825.00000	684.59659	17.0%	4.9	1075s
1047057	344263	732.37309	54	73	825.00000	684.82657	17.0%	4.9	1080s
1052158	345274	782.04748	78	42	825.00000	685.15419	17.0%	4.9	1085s
1058168	346648	794.45261	57	59	825.00000	685.48071	16.9%	4.9	1090s
1063235	347589	769.01710	60	34	825.00000	685.79705	16.9%	4.9	1095s
1068433	348710	infeasible	103		825.00000	686.12592	16.8%	4.9	1100s
1073428	349871	754.42980	62	42	825.00000	686.42015	16.8%	4.9	1105s
1078909	350953	742.27911	57	56	825.00000	686.71109	16.8%	4.9	1110s
1083689	351936	761.89059	60	29	825.00000	686.98687	16.7%	4.9	1115s
1088669	352668	cutoff	79		825.00000	687.30272	16.7%	4.9	1120s
1094171	353757	690.42777	63	55	825.00000	687.65948	16.6%	4.9	1125s
1099604	354952	741.89206	66	60	825.00000	687.96213	16.6%	4.9	1130s
1105084	356169	782.12209	110	16	825.00000	688.26635	16.6%	4.9	1135s
1110270	357106	745.34414	66	42	825.00000	688.58353	16.5%	4.9	1140s
1117243	358680	cutoff	49		825.00000	688.93857	16.5%	4.9	1145s
1121907	359734	cutoff	55		825.00000	689.16879	16.5%	4.9	1150s
1127838	360912	711.60936	60	67	825.00000	689.47918	16.4%	4.9	1155s
1133353	362129	699.26940	65	49	825.00000	689.76729	16.4%	4.9	1160s
1138791	363085	744.64967	86	54	825.00000	690.08436	16.4%	4.9	1165s
1143193	364097	cutoff	71		825.00000	690.30008	16.3%	4.9	1170s
1148429	365075	cutoff	65		825.00000	690.58099	16.3%	4.9	1175s
1154385	366291	702.01981	58	58	825.00000	690.90952	16.3%	4.9	1180s
1159792	367259	791.25068	75	53	825.00000	691.20891	16.2%	4.9	1185s
1164675	368239	cutoff	86		825.00000	691.46981	16.2%	4.9	1190s
1171157	369385	731.33969	57	56	825.00000	691.85024	16.1%	4.9	1195s
1177198	370679	cutoff	80		825.00000	692.16939	16.1%	4.9	1200s
1182597	371669	cutoff	57		825.00000	692.44856	16.1%	4.9	1205s
1187880	372664	733.77677	75	48	825.00000	692.74578	16.0%	4.9	1210s
1193566	373688	704.69152	93	71	825.00000	693.06249	16.0%	4.9	1215s
1200513	375118	722.61692	69	58	825.00000	693.40564	16.0%	4.9	1220s
1206452	376116	infeasible	71		825.00000	693.73060	15.9%	4.9	1225s
1210531	376877	808.10713	62	54	825.00000	693.92228	15.9%	4.9	1230s
1217304	378068	755.92404	55	42	825.00000	694.29148	15.8%	4.9	1235s
1223171	379030	715.97212	68	56	825.00000	694.58925	15.8%	4.9	1240s
1227073	379690	729.29587	78	47	825.00000	694.82020	15.8%	4.9	1245s
1232435	380847	infeasible	63		825.00000	695.06910	15.7%	4.9	1250s
1237637	381885	800.34606	71	46	825.00000	695.33837	15.7%	4.9	1255s
1243127	382844	infeasible	71		825.00000	695.60430	15.7%	4.9	1260s
1248334	383781	cutoff	62		825.00000	695.87811	15.7%	4.9	1265s
1252958	384610	cutoff	50		825.00000	696.11533	15.6%	4.9	1270s
1258545	385729	cutoff	79		825.00000	696.40721	15.6%	5.0	1275s
1264615	386969	cutoff	93		825.00000	696.72009	15.5%	5.0	1280s
1267573	387372	infeasible	92		825.00000	696.88445	15.5%	5.0	1285s
1274183	388637	745.61348	69	50	825.00000	697.18085	15.5%	5.0	1290s
1279895	389738	796.66298	62	42	825.00000	697.44907	15.5%	5.0	1295s
1286015	390804	733.66672	58	60	825.00000	697.75770	15.4%	5.0	1300s
1290302	391688	cutoff	69		825.00000	697.93857	15.4%	5.0	1305s
1296816	393234	cutoff	57		825.00000	698.22772	15.4%	5.0	1310s
1301599	393990	cutoff	60		825.00000	698.45540	15.3%	5.0	1315s
1306985	395071	cutoff	64		825.00000	698.72168	15.3%	5.0	1320s
1311856	396006	736.68926	65	54	825.00000	698.94878	15.3%	5.0	1325s
1317923	397038	cutoff	64		825.00000	699.21761	15.2%	5.0	1330s
1322502	397670	cutoff	94		825.00000	699.43423	15.2%	5.0	1335s
1329332	399054	711.68926	50	54	825.00000	699.73274	15.2%	5.0	1340s

1335008	400062	cutoff	54		825.00000	699.99097	15.2%	5.0	1345s
1339702	400782	764.10926	61	58	825.00000	700.21671	15.1%	5.0	1350s
1345691	401893	792.78146	65	62	825.00000	700.48973	15.1%	5.0	1355s
1350575	402565	infeasible	72		825.00000	700.73608	15.1%	5.0	1360s
1357347	403824	746.85581	61	42	825.00000	701.01274	15.0%	5.0	1365s
1361971	404592	800.15973	54	26	825.00000	701.24083	15.0%	5.0	1370s
1368886	405704	729.10271	60	16	825.00000	701.55481	15.0%	5.0	1375s
1374931	406823	cutoff	71		825.00000	701.82429	14.9%	5.0	1380s
1380732	407767	732.25448	77	67	825.00000	702.07413	14.9%	5.0	1385s
1386104	408515	802.21920	92	54	825.00000	702.33764	14.9%	5.0	1390s
1392171	409436	cutoff	62		825.00000	702.60027	14.8%	5.0	1395s
1397138	410348	cutoff	67		825.00000	702.81139	14.8%	5.0	1400s
1402580	411214	cutoff	79		825.00000	703.04236	14.8%	5.0	1405s
1407967	412132	infeasible	75		825.00000	703.28878	14.8%	5.0	1410s
1413851	413076	cutoff	74		825.00000	703.54273	14.7%	5.0	1415s
1420682	414451	cutoff	81		825.00000	703.84171	14.7%	5.0	1420s
1424657	415234	791.51941	49	47	825.00000	704.02436	14.7%	5.0	1425s
1430881	416216	707.34710	55	61	825.00000	704.29728	14.6%	5.0	1430s
1436167	417235	744.86517	54	59	825.00000	704.51234	14.6%	5.0	1435s
1441259	417953	cutoff	74		825.00000	704.74358	14.6%	5.0	1440s
1446383	418662	739.47561	75	61	825.00000	704.97334	14.5%	5.0	1445s
1451809	419530	719.16554	75	52	825.00000	705.20833	14.5%	5.0	1450s
1456880	420360	760.57462	68	45	825.00000	705.40614	14.5%	5.0	1455s
1462524	421351	811.11710	74	43	825.00000	705.64500	14.5%	5.0	1460s
1469046	422368	740.55914	51	48	825.00000	705.92392	14.4%	5.0	1465s
1474558	423035	783.15401	65	74	825.00000	706.16859	14.4%	5.0	1470s
1480196	423946	770.84253	97	53	825.00000	706.40245	14.4%	5.0	1475s
1485809	424773	cutoff	68		825.00000	706.61593	14.3%	5.0	1480s
1492453	425766	721.16658	66	43	825.00000	706.87919	14.3%	5.0	1485s
1498162	426501	800.08182	51	54	825.00000	707.10859	14.3%	5.0	1490s
1502942	427083	789.28147	73	15	825.00000	707.33481	14.3%	5.0	1495s
1508777	427876	771.17326	57	52	825.00000	707.57223	14.2%	5.0	1500s
1515469	428937	cutoff	69		825.00000	707.85633	14.2%	5.0	1505s
1522036	429842	724.32389	85	59	825.00000	708.12904	14.2%	5.0	1510s
1527890	430888	818.43316	62	44	825.00000	708.36012	14.1%	5.0	1515s
1535146	431918	766.06944	76	42	825.00000	708.64795	14.1%	5.0	1520s
1541744	432856	715.14822	61	53	825.00000	708.94026	14.1%	5.0	1525s
1548680	433967	740.44848	63	47	825.00000	709.20445	14.0%	5.0	1530s
1554556	434795	738.41970	77	58	825.00000	709.42792	14.0%	5.0	1535s
1559799	435526	787.77131	60	54	825.00000	709.63742	14.0%	5.0	1540s
1567190	436545	777.56583	60	58	825.00000	709.93804	13.9%	5.0	1545s
1574141	437440	737.81509	61	50	825.00000	710.21307	13.9%	5.0	1550s
1580738	438330	734.28021	71	50	825.00000	710.46041	13.9%	5.0	1555s
1588859	439745	815.86684	83	17	825.00000	710.76343	13.8%	5.0	1560s
1595747	440793	724.11376	49	51	825.00000	711.01654	13.8%	5.0	1565s
1600880	441515	787.12272	63	60	825.00000	711.21499	13.8%	5.0	1570s
1609094	442737	737.11884	67	57	825.00000	711.54271	13.8%	5.0	1575s
1612995	443301	cutoff	72		825.00000	711.67991	13.7%	5.0	1580s
1620119	444300	804.79758	74	42	825.00000	711.95317	13.7%	5.0	1585s
1625237	445033	cutoff	85		825.00000	712.13578	13.7%	5.0	1590s
1632282	446157	780.39277	68	20	825.00000	712.37799	13.7%	5.0	1595s
1639086	447130	cutoff	68		825.00000	712.64067	13.6%	5.0	1600s
1645566	447987	734.38763	62	48	825.00000	712.88081	13.6%	5.0	1605s
1652898	448940	770.20389	67	42	825.00000	713.14707	13.6%	5.0	1610s
1659570	449817	722.63684	65	57	825.00000	713.37508	13.5%	5.0	1615s
1666386	450826	726.50942	62	44	825.00000	713.62221	13.5%	5.0	1620s
1674215	451914	768.81911	55	45	825.00000	713.92426	13.5%	5.0	1625s
1680700	452809	754.04003	70	42	825.00000	714.15474	13.4%	5.0	1630s
1684247	453182	756.47976	59	53	825.00000	714.27797	13.4%	5.0	1635s
1690178	453998	767.25129	68	43	825.00000	714.48969	13.4%	5.0	1640s
1696505	454777	772.68364	81	42	825.00000	714.71713	13.4%	5.0	1645s
1703176	455675	769.76035	76	63	825.00000	714.93876	13.3%	5.0	1650s
1708692	456318	cutoff	76		825.00000	715.17338	13.3%	5.0	1655s
1716193	457228	cutoff	87		825.00000	715.42245	13.3%	5.0	1660s
1721370	457831	794.33362	79	46	825.00000	715.60271	13.3%	5.0	1665s
1727570	458482	786.72132	51	44	825.00000	715.82709	13.2%	5.0	1670s
1733577	459051	717.72871	81	66	825.00000	716.05037	13.2%	5.0	1675s
1739266	459713	719.08812	73	65	825.00000	716.24939	13.2%	5.0	1680s
1747037	460583	746.83949	80	51	825.00000	716.54382	13.1%	5.0	1686s
1753074	461279	796.27574	80	53	825.00000	716.75260	13.1%	5.0	1690s
1759196	462033	805.83915	61	42	825.00000	716.97601	13.1%	5.0	1695s

1764403	462697	795.09965	61	58	825.00000	717.14709	13.1%	5.0	1700s
1769152	463104	cutoff	60		825.00000	717.32589	13.1%	5.0	1705s
1777248	464094	802.89304	54	73	825.00000	717.60535	13.0%	5.0	1710s
1782057	464473	cutoff	63		825.00000	717.80644	13.0%	5.0	1715s
1788155	465035	cutoff	46		825.00000	718.02602	13.0%	5.0	1720s
1794355	465778	786.01520	66	18	825.00000	718.24552	12.9%	5.1	1725s
1800220	466502	801.81326	75	55	825.00000	718.44283	12.9%	5.1	1730s
1805240	466983	764.56669	65	42	825.00000	718.61202	12.9%	5.1	1735s
1811214	467739	728.76388	67	32	825.00000	718.80867	12.9%	5.1	1740s
1818446	468568	725.08747	53	42	825.00000	719.06812	12.8%	5.1	1745s
1824523	469115	cutoff	90		825.00000	719.26381	12.8%	5.1	1750s
1830750	469984	cutoff	60		825.00000	719.48400	12.8%	5.1	1755s
1837229	470589	infeasible	60		825.00000	719.70985	12.8%	5.1	1760s
1843110	471199	795.72986	70	54	825.00000	719.88670	12.7%	5.1	1765s
1850145	472023	784.91505	73	60	825.00000	720.15271	12.7%	5.1	1770s
1858034	472786	cutoff	97		825.00000	720.42139	12.7%	5.1	1775s
1863246	473188	735.95254	105	53	825.00000	720.60576	12.7%	5.1	1780s
1870348	473830	755.24731	82	20	825.00000	720.83446	12.6%	5.1	1785s
1874472	474197	755.72479	88	57	825.00000	720.99693	12.6%	5.1	1790s
1881280	474938	cutoff	94		825.00000	721.22103	12.6%	5.1	1795s
1886518	475446	798.16397	62	55	825.00000	721.38905	12.6%	5.1	1800s
1891822	475850	cutoff	64		825.00000	721.57819	12.5%	5.1	1805s
1898835	476482	756.48073	50	46	825.00000	721.81365	12.5%	5.1	1810s
1902318	476640	cutoff	57		825.00000	721.93277	12.5%	5.1	1815s
1909727	477466	cutoff	83		825.00000	722.17941	12.5%	5.1	1820s
1914349	477811	cutoff	81		825.00000	722.34068	12.4%	5.1	1825s
1921698	478456	813.04124	64	50	825.00000	722.58203	12.4%	5.1	1830s
1928105	478775	730.40837	54	51	825.00000	722.80463	12.4%	5.1	1835s
1933681	479366	infeasible	79		825.00000	722.99083	12.4%	5.1	1840s
1939360	479799	infeasible	58		825.00000	723.19030	12.3%	5.1	1845s
1944974	480393	741.33930	71	54	825.00000	723.35453	12.3%	5.1	1850s
1950313	480723	777.71767	76	42	825.00000	723.53258	12.3%	5.1	1855s
1956570	481291	776.67325	79	56	825.00000	723.74858	12.3%	5.1	1860s
1962044	481745	infeasible	83		825.00000	723.93952	12.2%	5.1	1865s
1969357	482387	747.08836	78	64	825.00000	724.17182	12.2%	5.1	1870s
1975005	482942	742.77629	66	65	825.00000	724.35333	12.2%	5.1	1875s
1980484	483364	746.30810	60	18	825.00000	724.52356	12.2%	5.1	1880s
1985410	483840	821.32842	71	34	825.00000	724.68018	12.2%	5.1	1885s
1992930	484633	755.99929	70	64	825.00000	724.90263	12.1%	5.1	1890s
1997828	485086	780.13115	57	47	825.00000	725.06297	12.1%	5.1	1895s
2004163	485542	753.79673	66	58	825.00000	725.24930	12.1%	5.1	1900s
2009696	485990	818.01710	53	37	825.00000	725.42822	12.1%	5.1	1905s
2016440	486471	cutoff	70		825.00000	725.64191	12.0%	5.1	1910s
2020688	486824	778.18512	72	55	825.00000	725.78692	12.0%	5.1	1915s
2027031	487369	812.79519	45	54	825.00000	725.97765	12.0%	5.1	1920s
2032435	487756	cutoff	51		825.00000	726.15952	12.0%	5.1	1925s
2037673	488165	732.03122	79	54	825.00000	726.33371	12.0%	5.1	1930s
2043138	488660	cutoff	46		825.00000	726.49448	11.9%	5.1	1935s
2049108	489163	cutoff	57		825.00000	726.68436	11.9%	5.1	1940s
2055635	489735	756.35534	56	46	825.00000	726.87968	11.9%	5.1	1945s
2062690	490286	748.59508	71	55	825.00000	727.08813	11.9%	5.1	1950s
2069480	490895	757.68285	84	50	825.00000	727.29488	11.8%	5.1	1955s
2076482	491357	cutoff	58		825.00000	727.51256	11.8%	5.1	1960s
2080901	491638	776.66272	72	51	825.00000	727.64400	11.8%	5.1	1965s
2086714	491947	758.83344	90	51	825.00000	727.83400	11.8%	5.1	1970s
2092359	492407	736.01170	58	62	825.00000	728.01404	11.8%	5.1	1975s
2098653	492808	cutoff	57		825.00000	728.21236	11.7%	5.1	1980s
2103839	493074	739.60691	62	52	825.00000	728.37909	11.7%	5.1	1985s
2110464	493424	732.97978	61	61	825.00000	728.59018	11.7%	5.1	1990s
2114756	493812	cutoff	71		825.00000	728.72081	11.7%	5.1	1995s
2120442	494324	cutoff	58		825.00000	728.86662	11.7%	5.1	2000s
2125373	494561	753.02187	74	43	825.00000	729.02668	11.6%	5.1	2005s
2130816	494876	infeasible	68		825.00000	729.19560	11.6%	5.1	2010s
2136445	495289	cutoff	77		825.00000	729.37115	11.6%	5.1	2015s
2142464	495812	751.90815	67	44	825.00000	729.55694	11.6%	5.1	2021s
2147872	496125	cutoff	76		825.00000	729.72124	11.5%	5.1	2025s
2152983	496525	794.81461	85	52	825.00000	729.87519	11.5%	5.1	2030s
2158061	496886	790.55664	72	46	825.00000	730.02996	11.5%	5.1	2035s
2162323	497065	791.04472	56	47	825.00000	730.15113	11.5%	5.1	2040s
2166893	497334	cutoff	66		825.00000	730.28787	11.5%	5.1	2045s
2172234	497565	743.79324	63	51	825.00000	730.45835	11.5%	5.1	2050s

2176832	497739	764.58641	85	35	825.00000	730.60260	11.4%	5.1	2055s
2182079	497989	cutoff	80		825.00000	730.76336	11.4%	5.1	2060s
2187647	498431	cutoff	53		825.00000	730.93783	11.4%	5.1	2065s
2191811	498577	infeasible	79		825.00000	731.06704	11.4%	5.1	2070s
2198294	498800	cutoff	60		825.00000	731.27039	11.4%	5.1	2075s
2205069	499220	794.41829	57	47	825.00000	731.49059	11.3%	5.1	2080s
2212130	499572	731.82455	61	65	825.00000	731.71206	11.3%	5.1	2085s
2217543	499870	797.89488	78	43	825.00000	731.88892	11.3%	5.1	2090s
2223447	499869	cutoff	53		825.00000	732.07738	11.3%	5.1	2095s
2228655	500093	797.28582	73	57	825.00000	732.22903	11.2%	5.1	2100s
2233525	500331	cutoff	60		825.00000	732.36707	11.2%	5.1	2105s
2237536	500484	cutoff	70		825.00000	732.49201	11.2%	5.1	2110s
2243689	500611	811.81739	55	56	825.00000	732.68680	11.2%	5.1	2115s
2249627	500878	745.99259	84	43	825.00000	732.87200	11.2%	5.1	2120s
2255721	501174	821.40428	89	67	825.00000	733.05170	11.1%	5.1	2125s
2260061	501227	770.40007	68	51	825.00000	733.19604	11.1%	5.1	2130s
2266046	501615	739.00186	62	21	825.00000	733.36134	11.1%	5.1	2135s
2271692	501776	cutoff	72		825.00000	733.53501	11.1%	5.1	2140s
2279509	502152	794.01447	62	44	825.00000	733.74410	11.1%	5.1	2145s
2284652	502511	cutoff	63		825.00000	733.90120	11.0%	5.1	2150s
2290089	502618	cutoff	67		825.00000	734.05938	11.0%	5.1	2155s
2296313	502763	768.67751	80	37	825.00000	734.23321	11.0%	5.1	2160s
2302677	503040	735.55338	72	44	825.00000	734.43054	11.0%	5.1	2165s
2308882	503307	765.35664	73	43	825.00000	734.60818	11.0%	5.1	2170s
2314228	503446	cutoff	97		825.00000	734.76876	10.9%	5.1	2175s
2320720	503735	cutoff	61		825.00000	734.95879	10.9%	5.1	2180s
2325848	503792	749.54178	72	50	825.00000	735.11674	10.9%	5.1	2185s
2331254	504227	cutoff	76		825.00000	735.26459	10.9%	5.1	2190s
2338483	504491	cutoff	93		825.00000	735.47919	10.9%	5.1	2195s
2344813	504729	742.18893	91	44	825.00000	735.65438	10.8%	5.1	2200s
2350978	504677	cutoff	59		825.00000	735.84119	10.8%	5.1	2205s
2356612	504809	748.09119	52	49	825.00000	736.01800	10.8%	5.1	2210s
2362842	504929	751.67816	62	58	825.00000	736.19997	10.8%	5.1	2215s
2368687	505150	812.23845	52	44	825.00000	736.36112	10.7%	5.1	2220s
2375065	505359	773.35819	53	50	825.00000	736.55737	10.7%	5.1	2225s
2380062	505366	798.22125	55	53	825.00000	736.70124	10.7%	5.1	2230s
2385650	505675	763.80038	58	58	825.00000	736.84785	10.7%	5.1	2235s
2391203	505781	cutoff	89		825.00000	737.01645	10.7%	5.1	2240s
2395419	505863	cutoff	81		825.00000	737.13746	10.7%	5.1	2245s
2402784	506146	798.34428	73	43	825.00000	737.34676	10.6%	5.1	2250s
2408665	506139	cutoff	70		825.00000	737.52736	10.6%	5.1	2255s
2415012	506393	742.97635	60	68	825.00000	737.70042	10.6%	5.1	2260s
2420734	506304	760.77187	72	43	825.00000	737.87363	10.6%	5.1	2265s
2425485	506333	801.91822	57	42	825.00000	738.01255	10.5%	5.1	2270s
2432482	506393	750.98159	57	48	825.00000	738.21307	10.5%	5.1	2275s
2437169	506589	cutoff	50		825.00000	738.34072	10.5%	5.1	2280s
2444142	506802	cutoff	75		825.00000	738.54722	10.5%	5.1	2285s
2449292	506888	804.32184	62	50	825.00000	738.69865	10.5%	5.1	2290s
2456833	506959	cutoff	54		825.00000	738.90640	10.4%	5.1	2295s
2461649	506900	811.17691	57	47	825.00000	739.04617	10.4%	5.1	2300s
2468985	507027	766.30838	70	50	825.00000	739.24157	10.4%	5.1	2305s
2474679	507121	cutoff	91		825.00000	739.39861	10.4%	5.1	2310s
2480574	507254	cutoff	59		825.00000	739.56019	10.4%	5.1	2315s
2486498	507395	cutoff	77		825.00000	739.71972	10.3%	5.1	2320s
2493120	507499	753.76957	80	55	825.00000	739.90366	10.3%	5.1	2325s
2500373	507603	792.26826	74	56	825.00000	740.09625	10.3%	5.1	2330s
2505852	507754	813.26773	72	47	825.00000	740.22726	10.3%	5.1	2335s
2511933	507740	754.03282	67	47	825.00000	740.40518	10.3%	5.1	2340s
2517837	507787	cutoff	66		825.00000	740.56774	10.2%	5.1	2345s
2523302	507679	779.79199	67	43	825.00000	740.71892	10.2%	5.1	2350s
2530620	507692	cutoff	78		825.00000	740.92850	10.2%	5.1	2355s
2535426	507571	795.24221	58	67	825.00000	741.06544	10.2%	5.1	2360s
2542289	507653	cutoff	79		825.00000	741.25283	10.2%	5.1	2365s
2545220	507653	infeasible	70		825.00000	741.34006	10.1%	5.1	2370s
2553783	507746	776.80315	73	53	825.00000	741.56935	10.1%	5.1	2375s
2558723	507502	815.39617	58	46	825.00000	741.70972	10.1%	5.1	2380s
2564846	507423	771.62133	65	42	825.00000	741.88363	10.1%	5.1	2385s
2571788	507498	cutoff	60		825.00000	742.06411	10.1%	5.1	2390s
2576986	507533	cutoff	64		825.00000	742.19723	10.0%	5.1	2395s
2583496	507558	793.07506	56	42	825.00000	742.36354	10.0%	5.1	2400s
2589888	507623	742.67681	79	22	825.00000	742.54752	10.0%	5.1	2405s



2595654	507405	791.62634	69	50	825.00000	742.69955	10.0%	5.1	2410s
2600886	507323	cutoff	63		825.00000	742.85754	10.0%	5.1	2415s
2607925	507176	infeasible	54		825.00000	743.04739	9.93%	5.1	2420s
2613455	507072	760.39384	80	61	825.00000	743.18838	9.92%	5.1	2425s
2620195	507095	767.60316	89	55	825.00000	743.36208	9.90%	5.1	2430s
2626520	507145	cutoff	63		825.00000	743.52471	9.88%	5.1	2435s
2631578	506944	797.27920	61	43	825.00000	743.65640	9.86%	5.1	2440s
2638689	506825	cutoff	44		825.00000	743.86142	9.83%	5.1	2445s
2645229	506680	777.06224	58	44	825.00000	744.04488	9.81%	5.1	2450s
2652468	506630	cutoff	57		825.00000	744.23103	9.79%	5.1	2455s
2658381	506468	747.91521	83	46	825.00000	744.38654	9.77%	5.1	2460s
2664599	506330	756.02908	56	51	825.00000	744.56473	9.75%	5.1	2465s
2671550	506208	749.19353	63	55	825.00000	744.75241	9.73%	5.1	2470s
2676743	505944	infeasible	76		825.00000	744.90695	9.71%	5.1	2475s
2683508	505912	762.55660	54	51	825.00000	745.08859	9.69%	5.1	2480s
2688589	505624	803.73139	73	41	825.00000	745.24506	9.67%	5.1	2485s
2692840	505485	756.80218	57	52	825.00000	745.35685	9.65%	5.1	2490s
2699182	505340	762.04192	67	61	825.00000	745.52349	9.63%	5.1	2495s
2704592	505304	789.54859	68	58	825.00000	745.66444	9.62%	5.1	2500s
2708791	505031	767.27033	99	50	825.00000	745.77767	9.60%	5.1	2505s
2714781	504976	cutoff	76		825.00000	745.92633	9.58%	5.1	2510s
2721243	504867	776.35999	53	45	825.00000	746.09695	9.56%	5.1	2515s
2725863	504837	788.92604	57	52	825.00000	746.22747	9.55%	5.1	2520s
2733265	504649	cutoff	57		825.00000	746.43444	9.52%	5.1	2525s
2738350	504803	770.94945	90	46	825.00000	746.55875	9.51%	5.1	2530s
2743658	504559	cutoff	80		825.00000	746.69730	9.49%	5.1	2535s
2750069	504359	cutoff	60		825.00000	746.86941	9.47%	5.1	2540s
2757749	504443	cutoff	68		825.00000	747.05758	9.45%	5.1	2545s
2763095	504138	cutoff	66		825.00000	747.19486	9.43%	5.1	2550s
2769672	503914	infeasible	90		825.00000	747.37064	9.41%	5.1	2555s
2774529	503670	cutoff	119		825.00000	747.51669	9.39%	5.1	2560s
2781746	503611	766.34057	58	74	825.00000	747.70016	9.37%	5.1	2565s
2787154	503243	759.34692	69	43	825.00000	747.85766	9.35%	5.1	2570s
2793521	503054	cutoff	70		825.00000	748.03266	9.33%	5.1	2575s
2800571	502998	805.11260	51	52	825.00000	748.21844	9.31%	5.1	2580s
2807259	503015	cutoff	76		825.00000	748.37717	9.29%	5.1	2585s
2812935	502806	780.55519	52	55	825.00000	748.53764	9.27%	5.1	2590s
2818918	502398	797.92380	94	57	825.00000	748.70024	9.25%	5.1	2595s
2824431	502202	748.84336	60	65	825.00000	748.84336	9.23%	5.1	2600s
2830469	502012	788.12739	52	48	825.00000	749.00692	9.21%	5.1	2605s
2836421	501665	802.67170	56	48	825.00000	749.17987	9.19%	5.1	2610s
2844142	501375	cutoff	61		825.00000	749.37654	9.17%	5.1	2615s
2849357	501020	781.54004	66	45	825.00000	749.52443	9.15%	5.1	2620s
2856187	500568	cutoff	80		825.00000	749.70298	9.13%	5.1	2625s
2862142	500067	763.18391	87	55	825.00000	749.88339	9.11%	5.1	2630s
2868724	499830	765.22500	61	47	825.00000	750.06361	9.08%	5.1	2635s
2874593	499497	cutoff	82		825.00000	750.21002	9.07%	5.1	2640s
2881657	499287	751.53208	62	40	825.00000	750.38793	9.04%	5.1	2645s
2886980	499065	753.34598	54	52	825.00000	750.53214	9.03%	5.1	2650s
2894184	498777	762.74764	67	51	825.00000	750.71726	9.00%	5.1	2655s
2899203	498275	789.15844	77	53	825.00000	750.86938	8.99%	5.1	2660s
2906399	497914	776.98724	68	51	825.00000	751.06022	8.96%	5.1	2665s
2912562	497577	813.84732	100	52	825.00000	751.22316	8.94%	5.1	2670s
2919552	497212	805.07818	90	45	825.00000	751.40318	8.92%	5.1	2675s
2925129	496920	cutoff	66		825.00000	751.55248	8.90%	5.1	2680s
2930133	496618	774.81230	44	50	825.00000	751.68851	8.89%	5.1	2685s
2936070	496228	823.68000	80	53	825.00000	751.86271	8.87%	5.1	2690s
2942439	495959	cutoff	78		825.00000	752.02650	8.85%	5.1	2695s
2949165	495575	784.41671	62	47	825.00000	752.19410	8.82%	5.1	2700s
2954454	495232	cutoff	73		825.00000	752.32583	8.81%	5.2	2705s
2960469	494711	infeasible	70		825.00000	752.49793	8.79%	5.2	2710s
2967534	494181	757.44140	70	61	825.00000	752.69087	8.76%	5.2	2715s
2975742	493564	cutoff	58		825.00000	752.90378	8.74%	5.2	2720s
2982071	493213	cutoff	74		825.00000	753.06316	8.72%	5.2	2725s
2988608	492795	810.71119	61	51	825.00000	753.21744	8.70%	5.2	2730s
2993838	492470	765.96208	67	52	825.00000	753.35521	8.68%	5.2	2735s
3001099	491788	cutoff	76		825.00000	753.54762	8.66%	5.2	2740s
3007304	491279	775.93189	80	54	825.00000	753.70605	8.64%	5.2	2745s
3012997	490852	771.99249	59	43	825.00000	753.85334	8.62%	5.2	2750s
3018739	490453	800.29432	67	43	825.00000	754.00160	8.61%	5.2	2755s
3024786	490002	infeasible	65		825.00000	754.16458	8.59%	5.2	2760s

3030349	489748	cutoff	70		825.00000	754.30189	8.57%	5.2	2765s
3036987	489283	cutoff	64		825.00000	754.47920	8.55%	5.2	2770s
3042232	488807	cutoff	80		825.00000	754.62891	8.53%	5.2	2775s
3048775	488246	cutoff	74		825.00000	754.80628	8.51%	5.2	2780s
3054147	487538	infeasible	63		825.00000	754.95797	8.49%	5.2	2785s
3059732	486957	814.73039	62	53	825.00000	755.11439	8.47%	5.2	2790s
3064589	486442	infeasible	59		825.00000	755.24480	8.46%	5.2	2795s
3070432	485916	cutoff	59		825.00000	755.39450	8.44%	5.2	2800s
3076967	485342	763.01340	68	54	825.00000	755.55664	8.42%	5.2	2805s
3082848	484814	758.63500	67	50	825.00000	755.72713	8.40%	5.2	2810s
3088489	484144	infeasible	72		825.00000	755.89047	8.38%	5.2	2815s
3094829	483542	758.48124	68	42	825.00000	756.05881	8.36%	5.2	2820s
3101476	482858	782.70799	72	43	825.00000	756.23520	8.34%	5.2	2825s
3106921	482371	771.34914	81	46	825.00000	756.37812	8.32%	5.2	2830s
3114242	481670	787.91984	48	50	825.00000	756.56854	8.29%	5.2	2835s
3119012	480967	765.58145	54	58	825.00000	756.70689	8.28%	5.2	2840s
3124460	480341	infeasible	51		825.00000	756.85243	8.26%	5.2	2845s
3131776	479600	822.26081	61	8	825.00000	757.04428	8.24%	5.2	2850s
3137898	478867	cutoff	70		825.00000	757.21175	8.22%	5.2	2855s
3145389	478049	761.13482	75	21	825.00000	757.41461	8.19%	5.2	2860s
3151171	477466	cutoff	71		825.00000	757.56932	8.17%	5.2	2865s
3157614	476696	infeasible	73		825.00000	757.74673	8.15%	5.2	2870s
3164359	475843	818.08337	67	42	825.00000	757.93071	8.13%	5.2	2875s
3171607	475005	cutoff	55		825.00000	758.13007	8.11%	5.2	2880s
3177613	474444	794.79688	82	44	825.00000	758.27643	8.09%	5.2	2885s
3184651	473733	780.65786	63	52	825.00000	758.45492	8.07%	5.2	2890s
3190811	472980	cutoff	62		825.00000	758.62246	8.05%	5.2	2895s
3197062	472273	808.27514	80	16	825.00000	758.78814	8.03%	5.2	2900s
3204476	471447	776.24419	60	42	825.00000	758.98238	8.00%	5.2	2905s
3210402	470794	796.82926	61	42	825.00000	759.13480	7.98%	5.2	2910s
3217761	469865	cutoff	56		825.00000	759.33890	7.96%	5.2	2915s
3224962	469085	805.64686	77	16	825.00000	759.52998	7.94%	5.2	2920s
3229811	468652	778.52219	74	46	825.00000	759.64543	7.92%	5.2	2925s
3236351	467927	783.33649	82	54	825.00000	759.81225	7.90%	5.2	2930s
3242670	467233	infeasible	64		825.00000	759.98036	7.88%	5.2	2935s
3249584	466419	794.86469	81	53	825.00000	760.16482	7.86%	5.2	2940s
3255861	465717	infeasible	81		825.00000	760.31948	7.84%	5.2	2945s
3262475	464850	777.09791	66	50	825.00000	760.49415	7.82%	5.2	2950s
3268898	464037	761.68427	62	54	825.00000	760.65396	7.80%	5.2	2955s
3275409	463147	781.80418	56	43	825.00000	760.82849	7.78%	5.2	2960s
3280721	462497	783.06031	59	45	825.00000	760.96384	7.76%	5.2	2965s
3287860	461753	cutoff	79		825.00000	761.14227	7.74%	5.2	2970s
3294640	460700	765.47081	58	50	825.00000	761.32707	7.72%	5.2	2975s
3299364	459845	794.14148	81	52	825.00000	761.46161	7.70%	5.2	2980s
3306064	458999	infeasible	72		825.00000	761.63517	7.68%	5.2	2985s
3312806	458010	cutoff	76		825.00000	761.81365	7.66%	5.2	2990s
3320989	456865	816.91179	69	59	825.00000	762.03380	7.63%	5.2	2995s
3326671	455978	cutoff	78		825.00000	762.17927	7.61%	5.2	3000s
3333078	454911	infeasible	69		825.00000	762.35774	7.59%	5.2	3005s
3337741	453888	770.45853	62	59	825.00000	762.50240	7.58%	5.2	3010s
3344626	452986	768.59966	78	16	825.00000	762.68910	7.55%	5.2	3015s
3353601	451884	783.64921	79	46	825.00000	762.91601	7.53%	5.2	3020s
3359601	450994	783.29488	84	42	825.00000	763.07620	7.51%	5.2	3025s
3366275	450116	767.85973	53	61	825.00000	763.24812	7.49%	5.2	3030s
3373138	449155	cutoff	59		825.00000	763.43465	7.46%	5.2	3035s
3380232	448035	cutoff	73		825.00000	763.62653	7.44%	5.2	3040s
3385538	447065	cutoff	75		825.00000	763.78623	7.42%	5.2	3045s
3391134	446239	768.99078	64	61	825.00000	763.93692	7.40%	5.2	3050s
3397000	445195	771.67789	62	54	825.00000	764.10206	7.38%	5.2	3055s
3404191	444129	cutoff	70		825.00000	764.28964	7.36%	5.2	3060s
3409754	443160	773.72440	60	43	825.00000	764.44593	7.34%	5.2	3065s
3417178	442001	809.55973	79	58	825.00000	764.64637	7.32%	5.2	3070s
3423408	440936	813.17282	59	42	825.00000	764.81957	7.29%	5.2	3075s
3429002	439774	cutoff	56		825.00000	764.98174	7.27%	5.2	3080s
3435334	438699	783.93476	57	65	825.00000	765.16059	7.25%	5.2	3085s
3441912	437627	cutoff	81		825.00000	765.33110	7.23%	5.2	3090s
3447177	436782	cutoff	65		825.00000	765.47081	7.22%	5.2	3095s
3454042	435765	790.76295	65	43	825.00000	765.64369	7.19%	5.2	3100s
3458533	434677	cutoff	71		825.00000	765.78560	7.18%	5.2	3105s
3464613	433576	813.95935	62	42	825.00000	765.95079	7.16%	5.2	3110s
3470320	432578	777.55878	68	45	825.00000	766.11336	7.14%	5.2	3115s

3477037	431337	cutoff	54		825.00000	766.29705	7.12%	5.2	3120s
3484635	429861	cutoff	70		825.00000	766.50207	7.09%	5.2	3125s
3491714	428552	cutoff	89		825.00000	766.69956	7.07%	5.2	3130s
3497408	427491	cutoff	67		825.00000	766.85155	7.05%	5.2	3135s
3504150	426313	cutoff	63		825.00000	767.02348	7.03%	5.2	3140s
3508895	425487	cutoff	73		825.00000	767.15678	7.01%	5.2	3145s
3514248	424343	814.02918	78	62	825.00000	767.31068	6.99%	5.2	3150s
3520991	422980	cutoff	45		825.00000	767.49815	6.97%	5.2	3155s
3527101	421738	773.42595	87	42	825.00000	767.67684	6.95%	5.2	3160s
3533641	420282	cutoff	70		825.00000	767.87282	6.92%	5.2	3165s
3540608	418834	796.79396	68	42	825.00000	768.07750	6.90%	5.2	3170s
3547307	417583	783.82482	57	46	825.00000	768.26122	6.88%	5.2	3175s
3553802	416293	cutoff	52		825.00000	768.43025	6.86%	5.2	3180s
3562132	414674	cutoff	67		825.00000	768.65659	6.83%	5.2	3185s
3569371	413168	cutoff	69		825.00000	768.86816	6.80%	5.2	3190s
3576642	411706	cutoff	55		825.00000	769.07885	6.78%	5.2	3195s
3582446	410418	cutoff	65		825.00000	769.24532	6.76%	5.2	3200s
3589561	408928	cutoff	76		825.00000	769.43131	6.74%	5.2	3205s
3594334	407870	802.47847	68	43	825.00000	769.56030	6.72%	5.2	3210s
3602073	406118	813.20325	113	44	825.00000	769.78006	6.69%	5.2	3215s
3609382	404454	cutoff	65		825.00000	769.98576	6.67%	5.2	3220s
3617056	402954	cutoff	64		825.00000	770.20347	6.64%	5.2	3225s
3623387	401493	cutoff	75		825.00000	770.37914	6.62%	5.2	3230s
3630042	400075	cutoff	63		825.00000	770.56143	6.60%	5.2	3235s
3637380	398410	cutoff	66		825.00000	770.77625	6.57%	5.2	3240s
3643734	396944	cutoff	74		825.00000	770.96410	6.55%	5.2	3245s
3651096	395301	cutoff	70		825.00000	771.17735	6.52%	5.2	3250s
3657787	393779	787.59814	58	44	825.00000	771.36403	6.50%	5.2	3255s
3664854	392298	802.15983	54	20	825.00000	771.55739	6.48%	5.2	3260s
3670882	390534	773.44096	47	66	825.00000	771.76116	6.45%	5.2	3265s
3677082	388817	792.86150	60	62	825.00000	771.95768	6.43%	5.2	3270s
3682077	387590	cutoff	73		825.00000	772.11337	6.41%	5.2	3275s
3689645	385666	cutoff	80		825.00000	772.33441	6.38%	5.2	3280s
3697069	383751	785.76166	61	54	825.00000	772.56019	6.36%	5.2	3285s
3705328	381597	cutoff	70		825.00000	772.81726	6.33%	5.2	3290s
3712309	379676	cutoff	68		825.00000	773.02848	6.30%	5.2	3295s
3718406	378250	777.04112	52	47	825.00000	773.20512	6.28%	5.2	3300s
3726064	376519	cutoff	75		825.00000	773.41391	6.25%	5.2	3305s
3731472	375041	785.61737	68	52	825.00000	773.57729	6.23%	5.2	3310s
3736520	373533	cutoff	66		825.00000	773.74424	6.21%	5.2	3315s
3743563	371672	cutoff	60		825.00000	773.95888	6.19%	5.2	3320s
3750805	369830	807.55778	57	64	825.00000	774.18190	6.16%	5.2	3325s
3758360	367994	813.31366	90	51	825.00000	774.40740	6.13%	5.2	3330s
3765492	366114	cutoff	73		825.00000	774.62275	6.11%	5.2	3335s
3772764	364053	cutoff	61		825.00000	774.85972	6.08%	5.2	3340s
3779993	362114	785.58498	75	55	825.00000	775.08547	6.05%	5.2	3345s
3787057	360384	791.99176	69	61	825.00000	775.29422	6.02%	5.2	3350s
3791945	359077	cutoff	67		825.00000	775.44439	6.01%	5.2	3355s
3799224	356956	infeasible	68		825.00000	775.67442	5.98%	5.2	3360s
3805604	355202	cutoff	85		825.00000	775.87062	5.96%	5.2	3365s
3813023	353219	783.97258	75	54	825.00000	776.10618	5.93%	5.2	3370s
3818375	351542	798.22432	64	49	825.00000	776.27447	5.91%	5.2	3375s
3826706	349194	cutoff	59		825.00000	776.53211	5.87%	5.2	3380s
3832330	347579	infeasible	57		825.00000	776.71484	5.85%	5.2	3385s
3841084	345158	cutoff	72		825.00000	776.99199	5.82%	5.2	3390s
3847793	343208	cutoff	67		825.00000	777.20497	5.79%	5.2	3395s
3854692	341136	815.91236	72	45	825.00000	777.42839	5.77%	5.2	3400s
3863176	338679	cutoff	58		825.00000	777.69525	5.73%	5.2	3405s
3870277	336519	813.09892	61	42	825.00000	777.92304	5.71%	5.2	3410s
3878294	334005	783.39541	68	60	825.00000	778.19066	5.67%	5.2	3415s
3885513	331746	cutoff	65		825.00000	778.42845	5.65%	5.2	3420s
3893283	329231	785.97017	67	55	825.00000	778.69657	5.61%	5.2	3425s
3901309	326673	781.65631	65	53	825.00000	778.95849	5.58%	5.2	3430s
3910278	323938	784.47840	76	60	825.00000	779.24736	5.55%	5.2	3435s
3917325	321726	cutoff	82		825.00000	779.48993	5.52%	5.2	3440s
3925474	319063	cutoff	67		825.00000	779.76094	5.48%	5.2	3445s
3932469	316783	811.30879	68	51	825.00000	779.99541	5.46%	5.2	3450s
3941498	313853	781.06630	52	53	825.00000	780.29553	5.42%	5.2	3455s
3950429	311467	cutoff	78		825.00000	780.56528	5.39%	5.2	3460s
3958935	308496	799.21281	57	67	825.00000	780.86424	5.35%	5.2	3465s
3966348	306150	782.79958	49	58	825.00000	781.11957	5.32%	5.2	3470s

3974733	303483	cutoff	83		825.00000	781.38584	5.29%	5.2	3475s
3982768	300820	cutoff	60		825.00000	781.66869	5.25%	5.2	3480s
3991439	297686	808.10208	52	50	825.00000	781.99369	5.21%	5.2	3485s
3999206	294927	cutoff	89		825.00000	782.25738	5.18%	5.2	3490s
4006823	292407	cutoff	70		825.00000	782.52140	5.15%	5.2	3495s
4012098	290304	cutoff	72		825.00000	782.71742	5.13%	5.2	3500s
4019668	287236	cutoff	78		825.00000	783.02056	5.09%	5.2	3505s
4027862	284572	cutoff	74		825.00000	783.30437	5.05%	5.2	3510s
4035207	282038	799.68476	86	55	825.00000	783.55445	5.02%	5.2	3515s
4042490	279219	cutoff	73		825.00000	783.84313	4.99%	5.2	3520s
4048555	276910	cutoff	94		825.00000	784.07770	4.96%	5.2	3525s
4055662	274365	cutoff	71		825.00000	784.33461	4.93%	5.2	3530s
4062656	271446	cutoff	53		825.00000	784.61939	4.89%	5.2	3535s
4067569	269374	infeasible	62		825.00000	784.82774	4.87%	5.2	3540s
4073976	266844	cutoff	63		825.00000	785.07806	4.84%	5.2	3545s
4081613	263916	cutoff	85		825.00000	785.37663	4.80%	5.2	3550s
4087594	261629	cutoff	72		825.00000	785.59823	4.78%	5.2	3555s
4095796	258236	infeasible	68		825.00000	785.92395	4.74%	5.2	3560s
4103559	255646	cutoff	81		825.00000	786.19696	4.70%	5.2	3565s
4110279	252843	791.94775	79	49	825.00000	786.45207	4.67%	5.2	3570s
4116677	250321	infeasible	94		825.00000	786.70685	4.64%	5.2	3575s
4124624	247181	814.20788	73	17	825.00000	787.01564	4.60%	5.2	3580s
4132425	244192	cutoff	61		825.00000	787.30640	4.57%	5.2	3585s
4139292	241223	796.15332	83	45	825.00000	787.60128	4.53%	5.2	3590s
4146861	237800	797.92838	54	35	825.00000	787.94113	4.49%	5.2	3595s
4153499	235047	infeasible	75		825.00000	788.21555	4.46%	5.2	3600s
4160508	231914	820.69108	63	47	825.00000	788.51588	4.42%	5.2	3605s
4167102	228989	789.51548	87	60	825.00000	788.80893	4.39%	5.2	3610s
4175086	225574	803.73270	67	38	825.00000	789.14159	4.35%	5.2	3615s
4182636	222160	cutoff	89		825.00000	789.46820	4.31%	5.2	3620s
4189654	218910	infeasible	64		825.00000	789.79548	4.27%	5.2	3625s
4196330	215854	cutoff	60		825.00000	790.09646	4.23%	5.2	3630s
4204335	212472	infeasible	104		825.00000	790.43952	4.19%	5.2	3635s
4212596	208569	infeasible	86		825.00000	790.84119	4.14%	5.2	3640s
4221208	204933	cutoff	70		825.00000	791.21838	4.09%	5.2	3645s
4229772	200943	793.18646	70	51	825.00000	791.63212	4.04%	5.2	3650s
4236785	197318	811.29241	58	53	825.00000	791.99887	4.00%	5.2	3655s
4244499	193924	cutoff	59		825.00000	792.35542	3.96%	5.2	3660s
4252081	189991	805.03371	67	54	825.00000	792.76118	3.91%	5.2	3665s
4259567	186489	cutoff	55		825.00000	793.13320	3.86%	5.2	3670s
4266737	182881	cutoff	53		825.00000	793.50991	3.82%	5.2	3675s
4273146	179520	cutoff	55		825.00000	793.85992	3.77%	5.2	3680s
4281005	175396	cutoff	73		825.00000	794.31482	3.72%	5.2	3685s
4288143	171651	infeasible	60		825.00000	794.72480	3.67%	5.2	3690s
4295233	167907	cutoff	54		825.00000	795.12745	3.62%	5.2	3695s
4302568	164059	cutoff	116		825.00000	795.56144	3.57%	5.2	3700s
4309123	160331	cutoff	78		825.00000	795.97920	3.52%	5.2	3705s
4316253	156641	infeasible	76		825.00000	796.39799	3.47%	5.2	3710s
4323487	152344	cutoff	59		825.00000	796.87358	3.41%	5.2	3715s
4330311	148458	cutoff	111		825.00000	797.30225	3.36%	5.2	3720s
4339070	143329	798.15175	47	67	825.00000	797.89909	3.28%	5.2	3725s
4345440	139876	cutoff	47		825.00000	798.30880	3.24%	5.2	3730s
4352772	135529	cutoff	81		825.00000	798.81273	3.17%	5.2	3735s
4360026	131358	cutoff	69		825.00000	799.32166	3.11%	5.2	3740s
4367588	126870	cutoff	65		825.00000	799.89032	3.04%	5.2	3745s
4375220	122616	814.05367	50	53	825.00000	800.42591	2.98%	5.2	3750s
4382843	117967	infeasible	60		825.00000	801.02355	2.91%	5.2	3755s
4389730	113854	cutoff	72		825.00000	801.54522	2.84%	5.2	3760s
4396823	109248	cutoff	76		825.00000	802.14668	2.77%	5.2	3765s
4405712	103629	infeasible	83		825.00000	802.91900	2.68%	5.2	3770s
4413144	99269	cutoff	81		825.00000	803.52662	2.60%	5.2	3775s
4419799	95056	805.79958	52	58	825.00000	804.12720	2.53%	5.2	3780s
4425714	91370	infeasible	57		825.00000	804.65359	2.47%	5.2	3785s
4434139	86046	cutoff	63		825.00000	805.45953	2.37%	5.2	3790s
4441879	80865	807.74371	60	75	825.00000	806.26913	2.27%	5.2	3795s
4448028	76557	cutoff	82		825.00000	806.94805	2.19%	5.2	3800s
4455008	71777	cutoff	53		825.00000	807.71751	2.09%	5.2	3805s
4463216	66057	cutoff	59		825.00000	808.66464	1.98%	5.2	3810s
4468792	62103	cutoff	89		825.00000	809.32804	1.90%	5.2	3815s
4476087	56823	cutoff	78		825.00000	810.26272	1.79%	5.2	3820s
4485233	49833	infeasible	102		825.00000	811.57643	1.63%	5.2	3825s

4495178	42151	cutoff	70	825.00000	813.14638	1.44%	5.2	3830s
4503996	34986	cutoff	89	825.00000	814.68643	1.25%	5.2	3835s
4513469	27148	cutoff	61	825.00000	816.53710	1.03%	5.2	3840s
4522741	19012	cutoff	73	825.00000	818.63439	0.77%	5.1	3845s
4534064	8547	infeasible	80	825.00000	821.67657	0.40%	5.1	3850s

## Cutting planes:

Gomory: 117  
 Cover: 310  
 MIR: 66  
 Flow cover: 9  
 GUB cover: 3  
 Zero half: 4  
 Mod-K: 2

Explored 4542880 nodes (23298436 simplex iterations) in 3853.57 seconds  
 Thread count was 4 (of 64 available processors)

Optimal solution found (tolerance 1.00e-04)

Best objective 8.250000000000e+02, best bound 8.250000000000e+02, gap 0.0%

Optimize a model with 1702 rows, 1719 columns and 19002 nonzeros

## Coefficient statistics:

Matrix range [9e-01, 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	8.2500000e+02	0.000000e+00	0.000000e+00	0s

Solved in 24 iterations and 0.00 seconds

Optimal objective 8.250000000e+02

Gurobi 6.5.0: optimal solution; objective 825

23298436 simplex iterations

4542880 branch-and-cut nodes

plus 24 simplex iterations for intbasis

: BX LX DX :=

12	1	1	.	.
12	2	1	.	.
12	3	1	.	.
30	1	1	.	.
30	2	1	.	.
30	3	1	.	.
163	1	.	1	0
163	2	.	1	0
163	3	.	1	0
166	1	.	1	0
166	2	.	1	0
166	3	.	1	0
187	1	.	1	0
187	2	.	1	0
187	3	.	1	0
260	1	.	0	1
260	2	.	0	1
260	3	.	0	1
266	1	.	0	1
266	2	.	0	1
266	3	.	0	1

;

: BY LY DY :=

McDonalds	1	1	0	0
McDonalds	2	1	0	0
McDonalds	3	1	0	0
'Salad Works'	1	0	1	0
'Salad Works'	2	0	1	0
'Salad Works'	3	0	1	0
Wendys	1	0	0	1
Wendys	2	0	0	1
Wendys	3	0	0	1

;

```

nutrSlack :=
Calories 1   -230
Calories 2   -230
Calories 3   -230
Carbsg  1    -15
Carbsg  2    -15
Carbsg  3    -15
Fatg     1    -1
Fatg     2    -1
Fatg     3    -1
Fiberg   1    -2
Fiberg   2    -2
Fiberg   3    -2
ProteinG 1   -21
ProteinG 2   -21
ProteinG 3   -21
Sugarg   1    -3
Sugarg   2    -3
Sugarg   3    -3
;

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] = 91.65

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] = 816

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] = 30.55

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] = 30.55

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] = 30.55

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] = 91.65

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] = 2170

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] = 2170

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] = 2170

```