## 1 Characteristics Model

			All In	nstances -							
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(U)	3600	41519	0.13398	46182	0.010933	3938	4939	8876	54076
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0	Feasible Feasible	(I)	3600.1 3600.1	41519 $41519$	1.5468 $0.71289$	43634 43634	0.0098772 $0.0092881$	3938 3938	8377 8377	16252 $12314$	16508 $33022$
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(L) (P)	3600.1	41519	0.71289	45732	0.018106	3938	4939	8876	166143
						45992		3938			11701
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.0 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1	Feasible Feasible	(STM) (U)	3600.2 3600.1	41382 43103	1.9407 0.10798	48023	0.033116 $0.016846$	4016	8377 5017	$\frac{16252}{9032}$	63235
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(I)	3600.1	43103	2.1167	45353	0.013779	4016	8533	16564	13630
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(L)	3600.2	43099	0.87887	45353	0.013779	4016	8533	12548	18081
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(P)	3600.2	43077	0.31095	47741	0.013203	4016	5017	9032	89495
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(STM)	3600.2	42867	2.2887	47641	0.04278	4016	8533	16564	7841
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(U)	3600.2	40740	0.14298	45614	0.015507	3862	4863	8724	40581
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(I)	3600.1	40731	1.8217	42905	0.012919	3862	8225	15948	15321
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(L)	3600.1	40744	0.98885	42905	0.011786	3862	8225	12086	39417
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(P)	3600.1	40744	0.28696	45193	0.021396	3862	4863	8724	101209
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM)	3600.3	40661	3.7624	45151	0.0349	3862	8225	15948	11041
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(U)	3600.1	41684	0.10199	46460	0.012334	3981	4982	8962	60230
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(I)	3600.1	41673	1.6687	43858	0.011429	3981	8463	16424	16240
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(L)	3600.2	41688	1.3328	43858	0.010751	3981	8463	12443	19131
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(P)	3600.1	41659	0.47093	46104	0.020903	3981	4982	8962	96281
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(STM)	3600.2	41628	1.9487	46101	0.031707	3981	8463	16424	14031
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(U)	3600.2	43650	0.12998	48327	0.010531	3905	4906	8810	67451
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(I)	3600.2	43650	2.0857	45672	0.0083027	3905	8311	16120	20211
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(L)	3600.2	43650	1.3038	45672	0.0076479	3905	8311	12215	23272
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(P)	3600.1	43628	0.39194	48016	0.019417	3905	4906	8810	106672
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(STM)	3600.3	43481	2.6856	48021	0.031055	3905	8311	16120	10201
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(U)	3600.1	41253	0.15398	46171	0.015631	3973	4974	8946	91780
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(I)	3600.2	41250	1.8487	43525	0.013913	3973	8447	16392	11552
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(L)	3600.1	41252	0.93986	43525	0.012524	3973	8447	12419	31911
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(P)	3600.1	41229	0.19597	45801	0.024924	3973	4974	8946	84101
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(STM)	3600.2	41017	2.5466	45966	0.041989	3973	8447	16392	14400
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(U)	3600.1	44144	0.14998	48916	0.013681	4064	5065	9128	70581
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(I)	3600.2	44150	2.5966	46187	0.011531	4064	8629	16756	13661
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(L)	3600.1	44143	1.6078	46187	0.010946	4064	8629	12692	36441
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(P)	3600.1	44139	0.35895	48606	0.020689	4064	5065	9128	89291
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(STM)	3600.3	43888	3.1715	48534	0.036855	4064	8629	16756	8041
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(U)	3600.1	42289	0.094986	46958	0.012517	4021	5022	9042	59641
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(I)	3600.2	42295	1.5338	44344	0.010047	4021	8543	16584	14293
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(L)	3600.1	42286	0.70589	44344	0.010504	4021	8543	12563	18219
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(P)	3600.1	42291	0.33595	46618	0.020981	4021	5022	9042	84220
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(STM)	3600.1	42239	1.6867	46611	0.030972	4021	8543	16584	17793
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(U)	3600.1	44326	0.12298	49287	0.012933	4039	5040	9078	63379
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(I)	3600.2	44326	2.7836	46583	0.011175	4039	8579	16656	12353
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(L)	3600.2	44321	1.3388	46583	0.0099536	4039	8579	12617	16071
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(P)	3600.1	44321	0.34295	48945 49004	0.021719	4039 4039	5040	9078	156884
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.8 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(STM) (U)	3600.5 3600.1	44290 43008	4.3663 0.10698	49004 47993	0.035708 $0.017136$	4039	8579 5054	$\frac{16656}{9106}$	11221 40691
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9 c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(I)	3600.1	43008	2.2847	45347	0.017136	4053	8607	16712	10630
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(L)	3600.1	43007	0.82687	45347	0.014513	4053	8607	12659	18891
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(P)	3600.1	42947	0.39294	47692	0.02795	4053	5054	9106	85311
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(STM)	3600.1	42797	3.7574	47682	0.042041	4053	8607	16712	9082
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(U)	3600.1	44434	0.12498	49137	0.0096196	3890	4891	8780	35388
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(I)	3600.1	44444	1.2978	46384	0.0087901	3890	8281	16060	18702
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(L)	3600.1	44440	1.2568	46384	0.0083997	3890	8281	12170	29801
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(P)	3600.1	44431	0.25696	48752	0.015584	3890	4891	8780	146860
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(STM)	3600.1	44392	1.7057	48884	0.027224	3890	8281	16060	15071
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(U)	3600.2	42789	0.13498	47700	0.013331	4000	5001	9000	33102
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(I)	3600.1	42796	1.7987	44858	0.010725	4000	8501	16500	12161
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(L)	3600.1	42796	1.0758	44858	0.010483	4000	8501	12500	14991
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(P)	3600.1	42801	0.31495	47372	0.022318	4000	5001	9000	97829
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3600.3	42684	2.6086	47311	0.035743	4000	8501	16500	8481
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	`(U) ´	3600.2	43522	0.15798	48445	0.013929	3871	4872	8742	46791
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(I)	3600.3	43532	2.2467	45613	0.011664	3871	8243	15984	11011
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(L)	3600.1	43532	0.73589	45613	0.010449	3871	8243	12113	18232
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(P)	3600.1	43522	0.34795	48127	0.022011	3871	4872	8742	117631
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(STM)	3600.3	43462	3.3505	48055	0.033335	3871	8243	15984	25431
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(U)	3600.1	41813	0.14298	46637	0.011525	3970	4971	8940	47023
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(I)	3600.3	41814	2.8726	43982	0.010167	3970	8441	16380	12722
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(L)	3600.1	41813	1.3548	43982	0.008516	3970	8441	12410	19248
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(P)	3600.2	41811	0.46193	46265	0.020347	3970	4971	8940	121361
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(STM)	3600.2	41696	1.4318	46374	0.032832	3970	8441	16380	8811
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(U)	3600.2	43482	0.16897	48438	0.016844	4081	5082	9162	41221
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(I)	3600.1	43473	2.2037	45688	0.014805	4081	8663	16824	9905
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(L)	3600	43498	0.6359	45688	0.013082	4081	8663	12743	25113
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(P)	3600.1	43465	0.42694	48096	0.025329	4081	5082	9162	94251
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(STM)	3600.2	43411	2.9176	47932	0.036972	4081	8663	16824	14211
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(U)	3600.1	42891	0.076988	47699	0.013288	4034	5035	9068	57391
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(I)	3600	42894	1.3308	45019	0.011191	4034	8569	16636	12219
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(L)	3600.1	42894	0.97285	45019	0.01084	4034	8569	12602	31931
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(P)	3600.1	42901	0.23596	47389	0.02206	4034	5035	9068	93121
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(STM)	3600.3	42781	2.5646	47254	0.033238	4034	8569	16636	9931

Comparison					stances -	Part 2						
considerable   Property   Prope	filename		formulation	time	value							nodes
Composition												62441
Con-Disco-Sip-Pr-70-web-in-li-Bi-Disco-Bi-Disc												17629
Con-Since-dip-7-co-8-1-1-1-00-d-0_2.17   Feasible (1) 360.1   41347   2.226   64113   0.04101												37451
c==50bc=31-p=7-c==k-1 h=100-d=0.25.17												82823
considerable per Tombel Libe 1004-06-02-17. Feasible (I) 2001. 4:0500 2:0576 4858 (407) 0.011852 2023 8347 [1012] 210 cension-2017 cens												8161
cn=500c=31-p-7cos=b-1-b-10d=0.25.17   Possible (I) 300.2   1506   1.208   3535   0.013205   3023   8347   1209   2875   1000c=31-p-7cos=b-1-b-10d=0.25.18   Possible (II) 300.2   1430   0.1288   83524   0.011919   4008   3019   9116   500   1430   0.1288   1507   0.011919   4008   3019   9116   500   1430   0.1288   1507   0.011919   4008   3019   9116   500   1430   0.1288   1507   0.011919   4008   3019   9116   500   1430   0.1288   1507   0.011919   4008   3019   9116   500   1430   0.011919   4008   3019   9116   500   1430   0.011919   4008   3019   9116   500   1430   0.011919   4008   3019   9116   500   4000												43601
cn=50bc=31p-7-cas=b=1 h=100d=0.25.18   Fasible (P) 3000 415:31 0.7889 4077 40 0.787123 3023 4921 8860 787 10 0.000 10 0.												11025
ca=50c=31c=31c=1c=1c=1c=1c=1c=2c=2c=2c=2c=2c=2c=2c=2c=2c=2c=2c=2c=2c												28761
Company   Comp												76748
c=50c=31p=7+0=8-1=1-h=100d=0.2±18   Fearble   (1)   360.1   3440   350.7   0.03756   350.8   8617   10732   131.6   10752   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   10752   131.6   1												7389
Camp												56680
Company   Comp	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(I)	3600.1	43450	1.6678	45567	0.0087548	4058	8617	16732	15900
Camp	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(L)		43450	0.93486	45567	0.0083972	4058		12674	21076
en=50c=31-p=7-c=81-lh=100d=0.25.19   Peasible (1) 3000.1 42805 0.162678 48074 0.011843 3021 8431 1638 1618 1618 1619 1619 1619 1619 1619 161	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(P)	3600.2	43450	0.32595	48009	0.019139	4058	5059	9116	96651
cn=500=31-p=7-os=51-h=100d=0.25.19   Peasible (I) 3000	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(STM)	3600.2	43279	3.1005	47962	0.035233	4058	8617	16732	11141
Composition   Parameter   P	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(U)	3600.2	42805	0.16298	48074	0.011843	3921	4922	8842	40267
cn=500c=31.p=7-∞=51=1.h=100d=0.25.19		Feasible			42801		45082		3921	8343	16184	16125
cn=50c=31-p=7-cs=b=1-h=100d=0.25.19	c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(L)	3600.1	42798	1.1528	45082	0.008883	3921	8343	12263	25871
CampSign = 7-08-bill-th = 100-de   25.19   Peasible (N)   3600.3   4226   2.7776   47802   0.012405   7250   7250   10512   1276   7250   72												142580
Cam 1000c = 37 pp 7-cos = 1 - 1 - 100 - de 0.25 o Peasible (U) 3600.3 85112 0.31895 94.00 0.12405 7256 9257 16512 107 20 15 10 10 10 10 10 10 10 10 10 10 10 10 10		Feasible	(STM)		42526	2.7776	47802	0.040569	3921	8343	16184	12451
Color   Colo					85120		94206		7256			17602
$ \begin{array}{c} c_{n=1}1000c_{n=3}T_{p=7}=r_{p=8}-l_{n-1}l_{n-1}100.d_{n-0}25.0 & Feasible & (\Gamma) & 3600.1 & 85138 & 2.850 & 0.6829 & 0.0094974 & 7556 & 15513 & 22768 & 92.000000000000000000000000000000000000$												8778
$ \begin{array}{c} c_{n=1}000c_{n=3}T_{p=7}T_{p=7}=s_{n=1}-l_{n}=100.d=0.25.0 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n=1}-l_{n}=100.d=0.25.1 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n=3}T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.1 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.2 \\ c_{n=1}000c_{n}=3T_{p=7}=r_{n}=s_{n}=l_{n}=10.0d=0.25.3 \\ c_{$		Feasible										9210
Consistion   Consisting   Con												40800
$\begin{array}{c} c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.1 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.2 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.3 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.4 \\ c_{n=1}000-c=37,p=7-o=8-1e-1h=100-d=0.25.5 \\ c_{n=1}000-c=3$												4778
$\begin{array}{c} \text{cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs} + 1 - \text{h} = 100 - \text{d} = 0.5.1 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.1 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.1 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.2 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.3 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.4 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.4 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.4 & Peanible \\ \text{Cn} = 1000 - \text{cs}^{-3} r_p = 7 - \text{cs}^{-3} + 1 - \text{h} = 100 - \text{d} = 0.5.4 & Peanible \\ \text{Cn} = 1000 - \text{cs}$												28381
Campion   Camp												5821
cn=1000-c=37-p=7-o=8-l=1-h=100-d=025.1 Feasible (STM) 3600.3 85596 0.81288 92992 0.022548 7193 9192 16368 5506 cn=1000-c=37-p=7-o=8-l=1-h=100-d=025.1 Feasible (STM) 3600.8 82393 7.1939 9230 0.043073 7193 1538 20772 52 0.0100-c=37-p=7-o=8-l=1-h=100-d=025.2 Feasible (I) 3600.9 83720 7.4089 88999 0.014421 7230 15461 22990 153 0.0100-c=37-p=7-o=8-l=1-h=100-d=025.2 Feasible (I) 3600.2 83750 0.09785 92669 0.025303 7230 15461 22690 10.0100-c=37-p=7-o=8-l=1-h=100-d=025.2 Feasible (I) 3600.2 83750 0.09785 92669 0.025303 7230 15461 22690 10.0100-c=37-p=7-o=8-l=1-h=100-d=025.2 Feasible (I) 3600.2 83750 0.09785 92669 0.025303 7230 15461 22690 10.0100-c=37-p=7-o=8-l=1-h=100-d=025.2 Feasible (I) 3600.2 83750 0.09785 92669 0.025303 7230 15461 22690 10.0100-c=37-p=7-o=8-l=1-h=100-d=025.3 Feasible (I) 3600.2 82487 6.703 9241 0.048660 7.040 140 140 140 140 140 140 140 140 140												9010
cn=1000-c=37-p=7-o=8-l=1-h=100-d=02.5.2   Feasible (T) 3600.8 82493   7.1939   92305   0.043673   7193   13385   29772   522   522   522   522   523   524   524   523   524	c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.1											55084
cn=1000-c=37-p=7-o=8-l=1-h=100-d=0;25;2 Feasible (I) 3600,3 83791 0.49293 93395 0.016107 7330 15461 2920 55 cn=1000-c=37-p=7-o=8-l=1-h=100-d=0;25;2 Feasible (II) 3600,2 83819 1.0187 88909 0.014273 7230 15461 2920 55 cn=1000-c=37-p=7-o=8-l=1-h=100-d=0;25;2 Feasible (II) 3600,2 83819 1.0187 88909 0.012736 7230 15461 2920 150 cn=1000-c=37-p=7-o=8-l=1-h=100-d=0;25;2 Feasible (II) 3600,2 82859 0.38394 92451 0.048566 7230 15461 2920 47 cn=1000-c=37-p=7-o=8-l=1-h=100-d=0;25;3 Feasible (II) 3600,1 82858 2.2007 87 97 97 97 97 97 97 97 97 97 97 97 97 97												5203
$\begin{array}{c} c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.2}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.2}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.2}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.2}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.2}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.4}\\ c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.5}\\ c_{n=1000-c=37;$												18769
$\begin{array}{c} c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.2\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.2\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.2\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.2\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.3\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.4\\ c_{n=1}1000-c=37; p=7-o=8-l=1-h=100-d=0.25.5\\ c_{n=1}1000-c=3$												5557
$\begin{array}{c} \text{cn} = 1000 - \text{ca} 37 - \text{pr} - \text{co} - \text{sl} - \text{l} - \text{l} - \text{b} - \text{l} 00 - \text{d} - 0.5.2 \\ \text{cn} = 1000 - \text{ca} 77 - \text{pr} - \text{co} - \text{sl} - \text{l} - \text{b} - \text{l} 0 - \text{d} - 0.5.2 \\ \text{cn} = 1000 - \text{ca} 77 - \text{pr} - \text{co} - \text{sl} - \text{l} - \text{b} - \text{l} - \text{l} - \text{l} - \text{d} - \text{l} -$												10367
$\begin{array}{c} c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.2} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.3} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.4} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.5} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.6} \\ c_{n=1000-c=37-p=7-o=8-1-h=1-h=10-d=0.25.$												79117
$\begin{array}{c} c_{n=1000-c=37;p=7-o=8-l=1-h=100-d=0.25.3} & Feasible & (U) & 3600.1 & 82959 & 0.38394 & 92456 & 0.015921 & 7144 & 19248 & 2036 & 0.01500-c=37;p=7-o=8-l=1-h=100-d=0.25.3 & Feasible & (L) & 3600.1 & 82858 & 2.2007 & 87033 & 0.013268 & 7144 & 15288 & 22342 & 596 & 0.01500-c=37;p=7-o=8-l=1-h=100-d=0.25.3 & Feasible & (P) & 3600.2 & 82858 & 2.2007 & 87033 & 0.013268 & 7144 & 19148 & 16288 & 4233 & 600.0000 & 100.00000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.0000 & 100.00000 & 100.0000 & 1$												4757
$\begin{array}{c} c_{n=1000-c=37-p=7-o=8+1-h=10-d=0.25.3} & \text{Feasible} & (1) & 3600.7 & 82848 & 6.1091 & 87033 & 0.01395 & 7144 & 15288 & 22576 & 4516 & 6.1000-c=37-p=7-o=8+1-h=10-d=0.25.3 & \text{Feasible} & (P) & 3600.2 & 82854 & 0.94286 & 91582 & 0.025327 & 7144 & 15288 & 22432 & 596 & 6.1000-c=37-p=7-o=8+1-h=10-d=0.25.4 & \text{Feasible} & (P) & 3600.2 & 82854 & 0.94286 & 91582 & 0.025327 & 7144 & 19144 & 16288 & 42332 & 596 & 6.1000-c=37-p=7-o=8+1-h=10-d=0.25.4 & \text{Feasible} & (U) & 3600.2 & 82854 & 0.94286 & 91582 & 0.025327 & 7144 & 19144 & 16288 & 42332 & 596 & 6.1000-c=37-p=7-o=8+1-h=10-d=0.25.4 & \text{Feasible} & (U) & 3600.2 & 84968 & 3.9804 & 88558 & 0.012578 & 7105 & 15211 & 22420 & 1088 & 6.1000-c=37-p=7-o=8+1-h=10-d=0.25.4 & \text{Feasible} & (P) & 3600.2 & 84968 & 3.9804 & 88558 & 0.01018 & 7105 & 15211 & 22315 & 1020-c=1000-c=37-p=7-o=8+1-h=10-d=0.25.4 & \text{Feasible} & (P) & 3600.2 & 84955 & 0.74089 & 93453 & 0.021266 & 7105 & 9166 & 16210 & 667 & 6$												20343
$\begin{array}{c} c_{n=1000c=37p=7co=81=1,h=100-d=0.25.3} & Feasible & (L) & 3600.1 & 82858 & 2.2007 & 87033 & 0.013268 & 7144 & 15288 & 22432 & 598 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.3} & Feasible & (STM) & 3600.1 & 84951 & 0.025327 & 7144 & 9144 & 16288 & 839 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.4} & Feasible & (STM) & 3600.1 & 84951 & 0.02502 & 91741 & 0.035686 & 7144 & 15288 & 29376 & 622 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.4} & Feasible & (U) & 3600.1 & 84951 & 0.02602 & 84952 & 0.012576 & 7105 & 9106 & 16210 & 185 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.4} & Feasible & (U) & 3600.4 & 84967 & 3.6025 & 8858 & 0.01018 & 7105 & 15211 & 29240 & 530 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.4} & Feasible & (STM) & 3600.4 & 84967 & 3.6025 & 8858 & 0.01018 & 7105 & 1016 & 12210 & 607 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.4 & 84967 & 3.6025 & 8858 & 0.01018 & 7105 & 15211 & 29240 & 530 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.4 & 84967 & 3.6025 & 8858 & 0.01018 & 7105 & 15211 & 29240 & 530 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.4 & 84064 & 6.0421 & 93468 & 0.0389 & 7105 & 15211 & 29240 & 530 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.6 & 84373 & 4.8433 & 88532 & 0.012494 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.6 & 84373 & 4.8433 & 88532 & 0.012494 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.7 & 83236 & 6.904 & 93429 & 0.04507 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.7 & 83236 & 6.904 & 93429 & 0.04507 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.7 & 83236 & 6.904 & 93429 & 0.04507 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (STM) & 3600.7 & 83236 & 6.904 & 93429 & 0.04507 & 7155 & 15311 & 29620 & 611 \\ c_{n=1000c=37p=7co=81=1,h=100-d=0.25.5} & Feasible & (ST$												4551
$\begin{array}{c} c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.3} & Feasible & (P) & 3600.4 & 8265 & 0.94286 & 91582 & 0.025327 & 7144 & 9144 & 16288 & 433 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (U) & 3600.4 & 84067 & 3.60069 & 94275 & 0.012576 & 7105 & 9106 & 16210 & 185 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (U) & 3600.1 & 84951 & 0.29096 & 94275 & 0.012576 & 7105 & 9106 & 16210 & 185 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (U) & 3600.2 & 84967 & 3.60089 & 88588 & 0.010378 & 7105 & 15211 & 29240 & 108 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (U) & 3600.4 & 84067 & 3.60089 & 88588 & 0.010378 & 7105 & 15211 & 29240 & 108 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (U) & 3600.4 & 84067 & 3.60089 & 88588 & 0.010378 & 7105 & 15211 & 29240 & 108 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (U) & 3600.4 & 84067 & 3.60089 & 84089 & 0.01378 & 7105 & 15211 & 29240 & 5300 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (U) & 3600.2 & 84389 & 0.35396 & 94172 & 0.015348 & 7155 & 9156 & 16310 & 253 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (U) & 3600.2 & 84443 & 1.4158 & 88532 & 0.011329 & 7155 & 15511 & 22465 & 1550 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (E) & 3600.2 & 84443 & 1.4158 & 88532 & 0.011329 & 7155 & 15511 & 22465 & 1550 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (E) & 3600.2 & 83443 & 1.4158 & 88532 & 0.011329 & 7155 & 15511 & 22465 & 1550 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (E) & 3600.2 & 8306 & 6.904 & 93429 & 0.04907 & 7155 & 15511 & 29268 & 7144 & 10288 & 20142 & 1028 $												5962
$\begin{array}{c} c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.3} & Feasible & (STM) & 3600.1 & 8206 & 5.1702 & 91741 & 0.036686 & 7144 & 15288 & 29576 & 62.2 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (U) & 3600.1 & 84968 & 3.9804 & 88858 & 0.010378 & 7105 & 15211 & 29420 & 108 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (L) & 3600.2 & 84968 & 3.9804 & 88858 & 0.010378 & 7105 & 15211 & 29420 & 108 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.4} & Feasible & (P) & 3600.2 & 84955 & 0.74089 & 94353 & 0.021206 & 7105 & 9106 & 16210 & 675 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84955 & 0.74089 & 94353 & 0.021206 & 7105 & 9106 & 16210 & 675 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84435 & 0.4089 & 94353 & 0.021206 & 7105 & 9106 & 16210 & 675 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84435 & 4.8433 & 85532 & 0.011329 & 7155 & 15311 & 29620 & 613 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84435 & 4.8433 & 88532 & 0.012494 & 7155 & 15311 & 29620 & 613 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84435 & 4.8433 & 88532 & 0.012494 & 7155 & 15311 & 29620 & 613 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84435 & 4.8433 & 88532 & 0.012494 & 7155 & 15311 & 29620 & 715 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.2 & 84361 & 0.95586 & 93306 & 0.024749 & 7155 & 15311 & 29620 & 573 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.5} & Feasible & (P) & 3600.4 & 83055 & 0.37194 & 93228 & 0.01597 & 7144 & 19144 & 16288 & 29157 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.6} & Feasible & (U) & 3600.4 & 83055 & 0.37194 & 93228 & 0.01597 & 7144 & 19144 & 16288 & 21432 & 1020 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.6} & Feasible & (U) & 3600.1 & 82735 & 0.27096 & 91228 & 0.01597 & 7144 & 15288 & 29456 & 705 \\ c_{n=1000c=37-p=7-o=8-l=1-h=100d=0.25.6} & Feasible & (U) & 3600.1 & 82735 & 0.27096 & 91223 & 0.01597 & 7144 & 19144 & 16288 & 4186 \\ c_{n=1000c=37-p$												
C==1000-c=37-p=7-o=8-1=-1=100-d=0.25.4   Feasible (I) 3600.1   84951   0.29996   94275   0.012576   7105   9106   16210   185   0.012677-p=7-o=8-1=-1=100-d=0.25.4   Feasible (I) 3600.2   84967   3.6025   88858   0.01038   7105   15211   22315   102   0.01267-p=7-o=8-1=-1=100-d=0.25.4   Feasible (I) 3600.2   84955   0.74089   93453   0.021206   7105   9106   16210   6767   0.000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.0000-0.0000   0.00000-0.0000   0.0000-0.0000   0.00000-0.0000   0.00000-0.0000   0.00000-0.0000   0.00000-0.0000   0.00000-0.00000   0.00000-0.00000   0.00000-0.00000   0.0000000000												
Cam=1000-c=37-p=7-o=8-1=-h=100-d=0.25.4   Feasible   (I)   3600.2   84668   3.9804   88858   0.010378   7105   15211   29420   108   c=1000-c=37-p=7-o=8-1=-h=100-d=0.25.4   Feasible   (P)   3600.2   84955   0.70889   93453   0.021206   7105   9106   16210   667   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84955   0.70889   93453   0.021206   7105   9106   16210   667   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84388   0.3339   94172   0.015348   7155   9156   16310   235   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84388   0.3339   94172   0.015348   7155   9156   16310   235   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84388   0.3339   94172   0.015348   7155   9156   16310   235   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84381   0.0339   94172   0.015348   7155   9156   16310   235   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.5   Feasible   (V)   3600.2   84381   0.05868   93306   0.004749   7155   9156   16310   492   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.2   84381   0.05868   93306   0.004749   7155   9156   16310   492   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.4   83055   0.37194   9328   0.01697   7154   9144   16288   211   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.2   83055   0.37194   9328   0.01597   7144   9144   16288   211   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.1   8305   0.37194   9328   0.01597   7144   9144   16288   211   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.1   8305   0.37194   9328   0.01597   7144   9144   16288   213   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.1   8305   0.37194   9328   0.01597   7144   9144   16288   213   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.1   8305   0.37194   9305   0.03367   7144   9144   16288   213   0.000-c=37-p=7-o=8-1=-h=100-d=0.25.6   Feasible   (V)   3600.1   8305   0.37184   9305   0.03367   7144   9144												
c=1000-c=37-p=7-o=8-1=1-h=100-d=0.25.4 Feasible (D) 3600.2 84955 0.74089 93453 0.021206 7105 9106 16210 667 c=1000-c=37-p=7-o=8-1=1-h=100-d=0.25.4 Feasible (STM) 3600.4 84054 0.0421 93468 0.0389 7105 15211 293420 53 c=1000-c=37-p=7-o=8-1=1-h=100-d=0.25.5 Feasible (U) 3600.6 84375 41838 85532 0.012349 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15211 293408 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 15311 2905 0.0389 7105 0.0389 7105 15311 2905 0.0389 7105 0												
c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.4 Feasible (P) 3600.2 84955 0.74089 93453 0.021206 7105 15211 29420 536 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (U) 3600.4 84004 6.0421 93468 0.0389 7105 15211 29420 536 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (U) 3600.6 84375 4.8433 88532 0.015348 7155 15311 29620 615 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (L) 3600.2 84343 1.4158 88532 0.011329 7155 15311 29620 615 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (P) 3600.3 84361 0.95586 93306 0.024749 7155 9156 16310 925 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (P) 3600.3 84361 0.95586 93306 0.024749 7155 9156 16310 925 c=n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.5 Feasible (W) 3600.4 83055 0.37194 92328 0.01597 7144 9144 16288 211 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (U) 3600.4 83055 0.37194 92328 0.01597 7144 9144 16288 211 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (L) 3600.7 83057 4.9192 87024 0.011527 7144 15288 29576 70.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (L) 3600.7 83057 83055 87024 0.011527 7144 15288 22432 102 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (L) 3600.1 83045 3.5505 87024 0.011527 7144 15288 22432 102 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (L) 3600.1 83045 3.5505 87024 0.011527 7144 15288 22432 102 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (L) 3600.1 83045 3.5505 87024 0.011527 7144 15288 22432 102 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.6 Feasible (U) 3600.1 83045 3.5505 87024 0.011527 7144 15288 22432 102 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.7 Feasible (U) 3600.1 82755 0.27696 9220 0.01459 7057 9058 16114 388 0.000-c=37-p=7-o=8-l=1-h=100-d=0.25.7 Feasible (U) 3600.1 82741 0.000-d=0.25.7 9058 16114 3286 2242 7.55489 9399 0.000-d=0.25.7 9058 16114 3286 2267 7.000-d=0.25.8 Feasible (U) 3600.1 82304 0.000-d=0.25.8 Feasible (U) 3600.1 82304 0.000-d=0.25.9 Feasible (U) 3600.1 82304 0.000-d=0.25.9 Feasible (U) 3600.1												
$\begin{array}{c} \text{cn} = 1000 - \text{cs} 37 - \text{p} - \text{co} = \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.4 \\ \text{cn} = 1000 - \text{cc} 37 - \text{p} - \text{7} - \text{ce} = \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} 37 - \text{p} - \text{7} - \text{ce} = \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} + \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 00 - \text{d} = 0.25.5 \\ \text{c} - \text{easible} \end{array} \qquad (\text{IV} )  3600.3  84361  0.95586  93306  0.024749  7155  15311  29620  577 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 00 - \text{d} = 0.25.6 \\ \text{Feasible} \qquad (\text{IV})  3600.4  83055  0.37194  92328  0.01597  7144  9144  16288  29176  7149 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 00 - \text{d} = 0.25.6 \\ \text{Feasible} \qquad (\text{IV})  3600.4  83055  4.992  87024  0.01587  7144  15288  29576  700 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 0 - \text{d} - \text{d} - \text{2}.5 \\ \text{Feasible} \qquad (\text{IV})  3600.1  83021  0.77688  91423  0.023807  7144  14288  29576  700 \\ \text{c} - \text{m} = 1000 - \text{cc} - 37 - \text{p} - \text{ce} - \text{8} - \text{1} - \text{1} - \text{1} 0 - \text{d} - \text{d} - \text{2}.5 \\ \text{Feasible} \qquad (\text{IV})  3600.1  82011  8.1038  91738  0.04346  7144  15288  29432  0.01597  7144  15288  29432  0.01597  7144  15288  12432  10.01592  10 - \text{1} 0.000  10 - \text{1} 0.0000  10 - \text{1} 0.0000  10 - \text{1} 0.0000  10 - \text{1} 0.00000  10 - \text{1} 0.00000000000000000000000000000000000$												
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$\begin{array}{c} \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 + 1 + 100 - \text{d} = 0.25.6 & \text{Feasible} & (\text{F}) & 3600.1 & 83021 & 0.77688 & 91423 & 0.023807 & 7144 & 15288 & 29576 & 542 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 + 1 + 100 - \text{d} = 0.25.7 & \text{Feasible} & (\text{U}) & 3600.1 & 82785 & 0.27696 & 9220 & 0.014549 & 7087 & 9058 & 16114 & 383 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.7 & \text{Feasible} & (\text{U}) & 3600.1 & 82785 & 0.27696 & 9220 & 0.014549 & 7087 & 9058 & 16114 & 383 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.7 & \text{Feasible} & (\text{I}) & 3600.2 & 82755 & 3.3315 & 86813 & 0.011097 & 7087 & 15115 & 22127 & 973 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.7 & \text{Feasible} & (\text{I}) & 3600.1 & 82732 & 1.6438 & 86813 & 0.011097 & 7087 & 15115 & 22171 & 973 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.7 & \text{Feasible} & (\text{P}) & 3600.1 & 82741 & 0.90286 & 91353 & 0.022888 & 7087 & 9058 & 16114 & 423 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.8 & \text{Feasible} & (\text{U}) & 3600.1 & 82741 & 0.90286 & 91353 & 0.022888 & 7087 & 9058 & 16114 & 423 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.8 & \text{Feasible} & (\text{U}) & 3600.1 & 8240 & 0.35095 & 94115 & 0.01701 & 7143 & 9143 & 16286 & 265 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.8 & \text{Feasible} & (\text{I}) & 3600.2 & 84387 & 3.7194 & 88555 & 0.017109 & 7143 & 15286 & 29572 & 733 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.8 & \text{Feasible} & (\text{P}) & 3600.2 & 84222 & 0.75489 & 93299 & 0.026347 & 7143 & 15286 & 29572 & 411 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.8 & \text{Feasible} & (\text{P}) & 3600.3 & 82538 & 3.395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 199 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 + 100 - \text{d} = 0.25.9 & \text{Feasible} & (\text$												7011
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$\begin{array}{c} \text{c.} - 1000 - \text{c.} - 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.7 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.7 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.7 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.7 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.7 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - \text{d.} = 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 + 1 - 1 - 100 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 10 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.8 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.9 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.9 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.9 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.9 \\ \text{c.} - 1000 - \text{c.} = 37 - \text{p.} - 7 - \text{o.} = 8 - 1 - 1 - 1 - 10 - 10 - 0.25.9 \\ \text{c.} - 1000 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 $												38315
$\begin{array}{c} \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.7 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.7 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 - \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n=} 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 $												7950
$\begin{array}{c} \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.7} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.8} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.9} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.10} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - \text{d=0.25.10} \\ \text{c-n} = 1000 - \text{c=37-p=7-} - \text{o=8-l=1-h} = 100 - d=0$												9736
$\begin{array}{c} \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{U}) & 3600.1 & 84340 & 0.35095 & 94115 & 0.01701 & 7143 & 9143 & 16286 & 262 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{L}) & 3600.2 & 84387 & 3.7194 & 88555 & 0.017109 & 7143 & 15286 & 22429 & 755 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{L}) & 3600.2 & 84387 & 3.7194 & 88555 & 0.012669 & 7143 & 15286 & 22429 & 755 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{P}) & 3600.2 & 84222 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 517 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{STM}) & 3600.3 & 84074 & 4.6403 & 93322 & 0.037244 & 7143 & 15286 & 29572 & 415 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (\text{U}) & 3600.3 & 82538 & 0.34395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 199 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (\text{U}) & 3600.3 & 82538 & 0.34395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 199 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (\text{L}) & 3600.7 & 82490 & 3.7134 & 86531 & 0.010749 & 7229 & 15457 & 22687 & 117 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (\text{L}) & 3600.3 & 82138 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 758 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (\text{U}) & 3600.3 & 82128 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 758 \\ \text{c-n}=1000-\text{c=37-p-7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (\text{U}) & 3600.4 & 84226 & 4.5103 & 88486 & 0.011629 & 7169 & 15339 & 22607 & 784 \\ \text{c-n}=1000-\text{c=37-p-7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (\text{U}) & 3600.4 & 84264 & 4.5103 & 88486 & 0.011629 & 7169 & 15339 & 22507 & 784 \\ \text{c-n}=1000-\text{c=37-p-7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (\text{U}) & 3600.4 & 84266 & 4.5103 & 88486 & 0.011629 & 7169 & 15339 & 22507 & 784 \\ \text{c-n}=1000-\text{c=37-p-7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (\text{U}) & 3600.2 & 82613 & 0.3794 & 92019 & 0.01428 & 7336 & 9337 & 16672$												42322
$\begin{array}{c} \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (1) & 3600.7 & 84041 & 6.57 & 88555 & 0.017109 & 7143 & 15286 & 29572 & 735 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (P) & 3600.2 & 84322 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 517 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (P) & 3600.2 & 84222 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 517 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (STM) & 3600.3 & 84074 & 4.6403 & 93322 & 0.037244 & 7143 & 15286 & 29572 & 411 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (U) & 3600.3 & 82538 & 0.34395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 199 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (I) & 3600.3 & 82504 & 5.9851 & 86531 & 0.010749 & 7229 & 15457 & 29916 & 531 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82490 & 3.7134 & 86531 & 0.010749 & 7229 & 15457 & 29916 & 531 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82433 & 1.4618 & 91302 & 0.023009 & 7229 & 9228 & 16458 & 672 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82183 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 753 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (U) & 3600.3 & 82188 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 753 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (U) & 3600.4 & 84226 & 4.5103 & 88486 & 0.013197 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 22507 & 783 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-c=337-p=7-o=8-l$												7124
$\begin{array}{c} \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (1) & 3600.7 & 84041 & 6.57 & 88555 & 0.017109 & 7143 & 15286 & 29572 & 735 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (P) & 3600.2 & 84322 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 517 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (P) & 3600.2 & 84222 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 517 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (STM) & 3600.3 & 84074 & 4.6403 & 93322 & 0.037244 & 7143 & 15286 & 29572 & 411 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (U) & 3600.3 & 82538 & 0.34395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 199 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (I) & 3600.3 & 82504 & 5.9851 & 86531 & 0.010749 & 7229 & 15457 & 29916 & 531 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82490 & 3.7134 & 86531 & 0.010749 & 7229 & 15457 & 29916 & 531 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82433 & 1.4618 & 91302 & 0.023009 & 7229 & 9228 & 16458 & 672 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82183 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 753 \\ \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (U) & 3600.3 & 82188 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 753 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (U) & 3600.4 & 84226 & 4.5103 & 88486 & 0.013197 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 22507 & 783 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-\text{c=337-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (P) & 3600.1 & 84265 & 1.0678 & 93091 & 0.024769 & 7169 & 15339 & 29676 & 544 \\ \text{c-n}=1000-c=337-p=7-o=8-l$	c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(U)	3600.1	84340	0.35095	94115	0.01701	7143	9143		26287
$\begin{array}{c} \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (L) & 3600.2 & 84327 & 3.7194 & 88555 & 0.012669 & 7143 & 15286 & 22429 & 75560 & 201000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (P) & 3600.2 & 84222 & 0.75489 & 93299 & 0.026347 & 7143 & 9143 & 16286 & 5176000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (STM) & 3600.3 & 84074 & 4.6403 & 93322 & 0.037244 & 7143 & 15286 & 29572 & 4136000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (U) & 3600.3 & 82538 & 0.34395 & 92082 & 0.014251 & 7229 & 9228 & 16458 & 1998000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (U) & 3600.3 & 82594 & 5.9851 & 86531 & 0.010749 & 7229 & 15457 & 29916 & 533600-\text{c=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (L) & 3600.7 & 82490 & 3.7134 & 86531 & 0.010575 & 7229 & 15457 & 22687 & 1176000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (P) & 3600.3 & 82493 & 3.7134 & 86531 & 0.010575 & 7229 & 15457 & 22687 & 1176000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.9} & \text{Feasible} & (STM) & 3600.3 & 82183 & 3.5075 & 91256 & 0.035107 & 7229 & 15457 & 29916 & 7560000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (U) & 3600.3 & 84318 & 0.42594 & 93997 & 0.014985 & 7169 & 9170 & 16338 & 2090 & \text{c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (L) & 3600.4 & 84226 & 4.5103 & 88486 & 0.011629 & 7169 & 15339 & 22507 & 788 & \text{c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (L) & 3600.4 & 84326 & 2.7836 & 88486 & 0.011629 & 7169 & 15339 & 22507 & 788 & \text{c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.10} & \text{Feasible} & (BTM) & 3600.5 & 83893 & 5.8621 & 93360 & 0.037205 & 7169 & 15339 & 22507 & 788 & \text{c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.11} & \text{Feasible} & (U) & 3600.2 & 82518 & 0.3794 & 92019 & 0.01428 & 7336 & 15673 & 30344 & 5678 & \text{c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.11} & \text{Feasible} & (U) & 3600.2 & 82518 & 0.3899 & 9200 & 0.023147 & 7336 & 15673 & 23008 & 128600 & 1.4878 & 86555 & 0.010368 & 7336 & 15673 & 23008 & 128600 & 1.4878 & 86555 & 0.010368 & 7336 & 15673 & 2$									7143			7314
$\begin{array}{c} \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.8 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.9 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.10 \\ \text{c-n} = 1000 - \text{c=} 37 - \text{p=} 7 - \text{o=} 8 + \text{l=} 1 - \text{h=} 100 - \text{d=} 0.25.11 \\ \text{c-n} = 1$		Feasible	(L)		84387	3.7194		0.012669	7143	15286		7599
$\begin{array}{c} \text{c-n}=1000-\text{c=37-p=7-o=8-l=1-h=100-d=0.25.8} & \text{Feasible} & (\text{STM}) & 360.3 & 84074 & 4.6403 & 93322 & 0.037244 & 7143 & 152.66 & 295.72 & 41.72 & 152.66 & 295.72 & 41.72 & 295.72 & $												51769
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.8											4114
$\begin{array}{c} \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - \text{h} = 100 - \text{d} = 0.25.9 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - \text{h} = 100 - \text{d} = 0.25.9 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.9 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.9 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - \text{d} = 0.25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.10 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ \text{c.n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{c} = 8 - 1 - 1 - 1 - 100 - 10 - 25.11 \\ $	c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(U)		82538							19912
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Feasible										5319
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		Feasible		3600.7	82490	3.7134	86531	0.010575	7229	15457	22687	11760
$\begin{array}{llllllllllllllllllllllllllllllllllll$		Feasible		3600.3	82433	1.4618	91302	0.023009	7229	9228	16458	67212
$\begin{array}{c} \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.10 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\ \text{c.n} = 1000 \cdot \text{c=} 37 \cdot \text{p=} 7 \cdot \text{o=} 8 \cdot \text{l=} 1 \cdot \text{h=} 100 \cdot \text{d=} 0.25.11 \\$		Feasible	(STM)	3600.3		3.5075	91256					7589
$\begin{array}{c} \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 + \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 + \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 + \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 + \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 + \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{c} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{c} = 8 - \text{l} = 1 - \text{h} = 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 1 $												20909
$\begin{array}{c} \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.10} \\ \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.10} \\ \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.10} \\ \text{Feasible} \\ \text{(P)} \\ 3600.1 \\ 3600.5 \\ 38993 \\ 3.8621 \\ 3360 \\ 0.37205 \\ 38993 \\ 3.8621 \\ 3360 \\ 0.037205 \\ 7169 \\ 9170 \\ 16339 \\ 22507 \\ 789 \\ 29676 \\ 544 \\ 29676 \\ 544 \\ 29676 \\ 29676 \\ 544 \\ 29676$												5441
$\begin{array}{c} \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - \text{h} = 100 - \text{d} = 0.25.10 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{p} = 7 - \text{o} = 8 - 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - \text{d} = 0.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 100 - 1 - 10 - 10.25.11 \\ \text{c-n} = 1000 - \text{c} = 37 - \text{c} = 1 - 1 - 10 - 10 - 10.25.11 \\ \text{c-n} = 1000 - 10 - 10 - 10 - 10 - 10 - 10 - $												7827
$ \begin{array}{c} \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.10} \\ \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.11} \\ \text{Feasible} \\ \text{Cl} \\ \text{3600.2} \\ \text{3200.2} \\ \text{32500} \\ \text{32500} \\ \text{32610} \\ \text{1.4878} \\ \text{86555} \\ \text{0.010368} \\ \text{7336} \\ \text{15673} \\ \text{3306} \\ \text{15673} \\ \text{23008} \\ \text{12800} \\ 1280$												45325
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$												5436
$ \begin{array}{llllllllllllllllllllllllllllllllllll$												18924
$\begin{array}{cccccccccccccccccccccccccccccccccccc$												5673
$ \text{c-n=}1000\text{-c=}37\text{-p=}7\text{-o=}8\text{-l=}1\text{-h=}100\text{-d=}0.25.11  \text{Feasible} \qquad (P) \qquad 3600.2  82578 \qquad 0.6389 \qquad 91220 \qquad 0.023147  7336  9337  16672  6523147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  16672  933147  7336  9337  933147  9$												12812
												65225
	c-n=1000-c=37-p=7-o=8-l=1-n=100-d=0.25.11 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3600.2	82378 82324	5.1862	91300	0.023147	7336	15673	30344	5428
0.1.1000 0.00 p., 0.00 1.1.1.1.100 1.1001 1.	5 M-1000-6-01-p-1-0-6-1-1-11-100-4-0.23.11	r casible	(01111)	5550.0	02324	0.1002	31300	0.004011	1330	10010	30344	0420

				nstances -							
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(U)	3600.4	85703	0.46193	95512 90002	0.015101	7100	9101	16200	20279
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12	Feasible Feasible	(I) (L)	3600.1 3600.4	85673 85678	$6.722 \\ 3.0415$	90002 90002	0.011911 $0.011857$	7100 7100	15201 $15201$	$\frac{29400}{22300}$	5717 9892
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(L) (P)	3600.4	85658	0.72489	94742	0.011837	7100	9101	16200	62877
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12 c-n=2000-c=37-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(STM)	3600.2	85298	5.8621	94646	0.024107	7100	15201	29400	5172
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(U)	3600.1	84046	0.44593	93109	0.013768	6896	8897	15792	29199
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(I)	3600.7	84007	4.4813	87786	0.0099174	6896	14793	28584	11128
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(L)	3600.4	84048	3.0505	87786	0.0087435	6896	14793	21688	17312
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(P)	3600.2	84006	0.81788	92232	0.020199	6896	8897	15792	52325
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(STM)	3600.3	83464	5.3032	92433	0.03323	6896	14793	28584	5967
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(U)	3600.2	85132	0.23497	94535	0.015534	7299	9299	16598	22093
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(I)	3600.2	84905	6.716	89270	0.01615	7299	15598	30196	4713
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(L)	3600.3	85075	2.8596	89270	0.012822	7299	15598	22897	6736
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(P)	3600.2	85049	0.43693	93790	0.025857	7299	9299	16598	55993
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(STM)	3600.2	83909	7.7788	93833	0.047388	7299	15598	30196	4519
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(U)	3600.2	81985	0.32295	91304	0.014242	7286	9287	16572	21541
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(I)	3600.5	81935	6.1681	85972	0.012538	7286	15573	30144	5133
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(L)	3600.2	81952	2.7236 0.90386	85972 90566	0.012157	7286 7286	15573	22858 16572	8811
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.15 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(P) (STM)	$3600.2 \\ 3600.4$	81936	0.0000	90550	0.024356		9287		65312 7083
	Feasible		3600.4	81544 83670	6.696 $0.27596$	93455	0.037008	7286 $7206$	15573 9206	$30144 \\ 16412$	30564
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16	Feasible Feasible	(U) (I)	3600.9	83515	7.9318	87828	0.014372 $0.013094$	7206	15412	29824	6187
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(L)	3600.9	83712	2.6956	87828	0.013094	7206	15412	22618	15624
c-n=1000-c=37-p=7-o=8-l=1-n=100-d=0.25.16 c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(E)	3600.1	83560	0.84187	92483	0.024405	7206	9206	16412	44384
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(STM)	3600.4	83285	6.324	92631	0.024403	7206	15412	29824	6487
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(U)	3600.3	81753	0.35495	91334	0.016938	7116	9117	16232	20725
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(I)	3600.1	81737	5.1172	85759	0.013032	7116	15233	29464	4683
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(L)	3600.7	81698	3.3655	85759	0.013699	7116	15233	22348	8071
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(P)	3600.2	81724	0.85887	90481	0.025527	7116	9117	16232	68041
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(STM)	3600.3	81291	4.8983	90579	0.039987	7116	15233	29464	5428
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(U)	3600.3	84182	0.44493	93646	0.01464	7098	9098	16196	31110
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(I)	3600.1	84127	4.9802	88126	0.012293	7098	15196	29392	9599
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(L)	3600.3	84216	2.7496	88126	0.010779	7098	15196	22294	12081
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(P)	3600.1	84171	0.36195	92814	0.021438	7098	9098	16196	107519
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(STM)	3600.6	83647	7.5279	92951	0.037167	7098	15196	29392	5399
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(U)	3600.2	83747	0.24996	93243	0.014617	7021	9021	16042	48040
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(I)	3600.3	83743	3.9774	87797	0.012192	7021	15042	29084	11953
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(L)	3600.2	83780	2.5846	87797	0.011257	7021	15042	22063	13001
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(P)	3600.2	83708	0.59591	92458	0.024046	7021	9021	16042	88254
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(STM)	3600.5	82478	6.1011	92490	0.046643	7021	15042	29084	5282
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(U)	3600.3	125133	0.6829	139371	0.01577	10843	13844	24686	13368
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(I)	3601 3600.4	125139	9.2946	131280 131280	0.011875 $0.010855$	10843	23187	44872 $34029$	4615 4113
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(L) (P)		125214	5.5872			10843	23187		
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.0 c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.0	Feasible Feasible	(STM)	3600.2 3601	125048 $123628$	1.2588 $9.4726$	138249 138457	0.026128 $0.044772$	10843 10843	13844 23187	24686 $44872$	45896 3415
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(U)	3600.5	126512	0.79388	140622	0.016231	10952	13953	24904	17113
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(I)	3601	126449	8.1668	132563	0.012785	10952	23405	45308	3409
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(L)	3600.4	126465	4.2394	132563	0.012344	10952	23405	34356	5517
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(P)	3600.2	126418	2.0557	139418	0.025616	10952	13953	24904	23005
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(STM)	3600.4	126077	8.4047	139502	0.03527	10952	23405	45308	4528
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	`(U) ´	3600.1	125682	0.29196	139886	0.016227	10660	13661	24320	24357
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(I)	3601	125484	7.8958	131755	0.013546	10660	22821	44140	4222
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(L)	3600.4	125627	5.7911	131755	0.011785	10660	22821	33480	3342
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(P)	3600.1	125626	1.5998	138736	0.026095	10660	13661	24320	28073
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM)	3601.1	114199	16.436	138639	0.13616	10660	22821	44140	822
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(U)	3600.3	124883	0.51392	139060	0.015843	10771	13772	24542	11697
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(I)	3600.9	124778	9.8975	130896	0.012878	10771	23043	44584	2228
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(L)	3600.7	124867	5.2312	130896	0.011702	10771	23043	33813	4417
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(P)	3600.3	124907	1.1408	137889	0.024733	10771	13772	24542	49695
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(STM)	3601.3	124228	10.63	137649	0.035923	10771	23043	44584	3128
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(U)	3600.1	124506	0.76888	138868	0.015822	10968	13968	24936	10202
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(I)	3600.2	124494	9.0126	130732	0.012593	10968	23436	45372	3292
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(L)	3600.1	124585	6.1781	130732	0.011596	10968	23436	34404	3467
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(P)	3600.5	124487	2.0847	137673	0.025893	10968	13968	24936	27620
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(STM)	3600.3	111189	14.586	137638	0.1563	10968	23436	45372	568 17066
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5 c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5	Feasible Feasible	(U) (I)	3600.2 3600.1	126183 125966	0.49293 $13.41$	140297 $132192$	0.014316 $0.013369$	10762 $10762$	13761 23023	24524 $44548$	17066 2201
c-n=1500-c=40-p=7-o=8-l=1-n=100-d=0.25.5 c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5	Feasible Feasible	(L)	3600.1	126191	2.5696	132192	0.013369	10762	23023	33786	9351
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5 c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(P)	3600.1	126037	2.1677	138940	0.011102	10762	13761	24524	31365
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(STM)	3601.4	117364	13.796	139096	0.10658	10762	23023	44548	712
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(U)	3600.2	124750	0.54592	138903	0.016132	10643	13644	24286	11477
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(I)	3600.1	124736	7.3709	130783	0.012118	10643	22787	44072	3039
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(L)	3600.1	124761	4.6093	130783	0.012116	10643	22787	33429	3997
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(P)	3600.2	124684	1.2298	137556	0.025389	10643	13644	24286	31360
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(STM)	3600.8	113971	14.374	137779	0.13076	10643	22787	44072	800
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(U)	3600.1	126308	0.31295	140692	0.015637	10876	13876	24752	21313
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(I)	3600.8	126035	10.618	132440	0.014245	10876	23252	45004	3797
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(L)	3600.7	126161	6.2611	132440	0.013372	10876	23252	34128	3510
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(P)	3600.4	126119	1.6198	139576	0.027765	10876	13876	24752	28499
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(STM)	3600.7	123013	12.534	139529	0.061268	10876	23252	45004	1397
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filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(U)	3600.4	127981	0.60791	141785	0.011622	10686	13687	24372	12312
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(I)	3600.2	127876	11.623	133615	0.0098626	10686	22873	44244	3902
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(L)	3600.3	127893	5.3622	133615	0.0092137	10686	22873	33558	4205
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(P)	3600.3	127824	1.5998	140611	0.022549	10686	13687	24372	70810
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(STM)	3600.9	126002	13.488	140619	0.043467	10686	22873	44244	3903
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(U)	3600.6	127785	0.71189	142615	0.017339	10988	13989	24976	11886 2412
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(I)	3601.2	127836	13.997	134332	0.013307	10988	23477	45452	
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(L)	3600.3	127842	4.3044	134332	0.012899	10988	23477	34464	4442
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(P)	3600.3	127687	1.6068	141201	0.028455	10988	13989	24976	27686
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(STM)	3600.7	117460	12.96	141582	0.12545	10988	23477	45452	910
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(U)	3600.3	122403	0.75689	137078	0.018179	10798	13799	24596	9740
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(I)	3600.4	122100	6.244	128856	0.016192	10798	23097	44692	3315
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(L)	3600.4	122492	4.5493	128856	0.012761	10798	23097	33894	3717
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(P)	3600.1	122410	1.3088	135937	0.029407	10798	13799	24596	27940
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(STM)	3600.3	107773	15.62	135850	0.17695	10798	23097	44692	604
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(U)	3600.5	126760	0.70189	140922	0.01491	10849	13850	24698	13717
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(I)	3600.1	126677	12.319	132875	0.012453	10849	23199	44896	2270
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(L)	3600.6	126693	5.4222	132875	0.011912	10849	23199	34047	4702
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(P)	3600.4	126598	1.9897	139749	0.025349	10849	13850	24698	32514
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3600.5	120538	15.346	139968	0.08445	10849	23199	44896	1211
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(U)	3600.2	124767	0.47693	139058	0.016103	10717	13715	24434	19307
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(I)	3600.2	124543	11.132	130778	0.01369	10717	22932	44368	2237
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(L)	3600.3	124779	3.2065	130778	0.011666	10717	22932	33651	6314
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(P)	3600.2	124663	1.1368	137724	0.026833	10717	13715	24434	33905
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(STM)	3600.8	122660	10.247	137944	0.049412	10717	22932	44368	3411
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(U)	3600.5	123885	0.6409	138682	0.01655	10774	13772	24548	12101
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(I)	3600.5	123861	8.1628	130205	0.013205	10774	23046	44596	3166
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(L)	3600.4	123781	5.1042	130205	0.01357	10774	23046	33822	4105
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(P)	3600.2	123740	1.2488	137410	0.028712	10774	13772	24548	33101
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(STM)	3601.2	115661	14.655	137462	0.1072	10774	23046	44596	688
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(U)	3600.3	125495	0.43693	139924	0.016071	10796	13796	24592	14929
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(I)	3600.6	125406	8.7307	131603	0.013166	10796	23092	44684	3702
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(L)	3600.5	125383	3.0555	131603	0.013116	10796	23092	33888	5006
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(P)	3600.3	125410	1.4928	138716	0.02783	10796	13796	24592	46729
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(STM)	3600.4	123536	7.1869	138843	0.049987	10796	23092	44684	6302
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(U)	3600.2	125612	0.75389	141853	0.028059	10739	13738	24478	10737
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(I)	3600.6	126594	8.8826	133417	0.01671	10739	22977	44456	3435
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(L)	3600.3	126830	4.7973	133417	0.014201	10739	22977	33717	3772
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(P)	3600.1	126914	1.8297	140545	0.028313	10739	13738	24478	36560
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(STM)	3600.2	122824	13.971	140726	0.068677	10739	22977	44456	546
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(U)	3600.1	125951	0.73189	140408	0.015702	10814	13815	24628	11026
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(I)	3600.3	125451	12.925	132064	0.015864	10814	23129	44756	2115
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(L)	3600.5	125866	4.3933	132064	0.01189	10814	23129	33942	8402
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(P)	3600.1	125762	1.5838	139130	0.025894	10814	13815	24628	40084
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(STM)	3601.1	115277	17.348	139263	0.12826	10814	23129	44756	716
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(U)	3600.4	125020	0.49393	138193	0.013191	10696	13697	24392	21686
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(I)	3601.4	124880	9.7335	130347	0.010748	10696	22893	44284	2668
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(L)	3600.8	125083	6.365	130347	0.0086481	10696	22893	33588	4592
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(P)	3600.6	124939	2.8956	137095	0.021472	10696	13697	24392	34085
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(STM)	3600.9	124660	11.862	137140	0.031197	10696	22893	44284	6250
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(U)	3600.1	126659	0.43793	141128	0.017355	10831	13830	24662	13701
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(I)	3600.4	126356	12.145	133010	0.015663	10831	23161	44824	3480
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(L)	3600.2	126509	2.7736	133010	0.01367	10831	23161	33993	3546
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(P)	3600.5	126443	1.8987	139958	0.02908	10831	13830	24662	22898
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(STM)	3600.6	118634	12.091	139982	0.10367	10831	23161	44824	1081
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(U)	3600.1	124235	0.61091	138421	0.015724	10764	13765	24528	13957
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(I)	3600.1	124211	8.9716	130268	0.013724	10764	23029	44556	2537
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(L)	3600.6	124211	4.4433	130268	0.011790	10764	23029	33792	7122
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(P)	3600.0	124238	1.8067	137063	0.010783	10764	13765	24528	44174
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(STM)	3601	115950	16.273	137512	0.10535	10764	23029	44556	926
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(U)	3600.4	166998	1.3928	186167	0.018262	14424	18420	32848	8511
	Feasible		3600.4	167062		175298		14424	30844	59696	1311
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.0 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.0	Feasible Feasible	(I) (L)	3600.9	166944	16.828 $10.447$	175298	0.013589 $0.013758$	14424	30844	45272	2227
c-n=2000-c=42-p=7-o=8-1=1-h=100-d=0.25.0 c-n=2000-c=42-p=7-o=8-1=1-h=100-d=0.25.0	Feasible	(P)	3600.9	167166	2.2417	184745	0.013738	14424	18420	32848	33842
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.0 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(STM)	3600.1	147060	26.79	184654	0.027344	14424	30844	59696	584
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.0 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(U)	3600.4	168081	0.91886	187643	0.019162	14784	18783	33568	10208
c-n=2000-c=42-p=7-o=8-l=1-n=100-d=0.25.1 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(I)	3600.2	168257	15.16	187643	0.019162 $0.013124$	14784	31567	61136	4318
c-n=2000-c=42-p=7-o=8-l=1-n=100-d=0.25.1 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(L)	3600.3	168384	7.6248	176278	0.013124 $0.012526$	14784	31567	46352	3607
		(L) (P)	3600.4	168384	3.0565	186036				33568	
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.1	Feasible						0.02958	14784	18783		14487
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(STM)	3617.7	149174	18.285	185890	0.16713	14784	31567	61136	518
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(U)	3600.1	167024	0.92686	186709	0.019267	14810	18810	33620	8428
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(I)	3600.4	162548	22.71	175621	0.043051	14810	31620	61240	570
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(L)	3600.6	167192	7.2179	175621	0.014037	14810	31620	46430	1973
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(P)	3600.4	166765	2.1857	185094	0.031803	14810	18810	33620	42671
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM)	3600.7	149118	27.704	185141	0.16081	14810	31620	61240	550
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(U)	3600.5	166712	1.2548	185967	0.020008	14769	18768	33538	7082
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(I)	3600.3	164368	21.732	175362	0.030442	14769	31537	61076	528
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(L)	3601	166855	12.179	175362	0.0147	14769	31537	46307	1300
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(P)	3600.4	166837	3.0835	184491	0.029097	14769	18768	33538	12697
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(STM)	3600.7	153290	23.067	184402	0.12668	14769	31537	61076	508

				stances - P	art 5						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(U)	3600.2	166388	1.3518	186674	0.022166	14726	18726	33452	6875
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4	Feasible Feasible	(I) (L)	3601.7 3600.8	165688 166728	16.896 8.7297	175478 $175478$	0.022558 $0.015523$	$14726 \\ 14726$	$31452 \\ 31452$	60904 $46178$	622 $2416$
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(P)	3600.3	166940	2.2457	185039	0.029773	14726	18726	33452	21562
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(STM)	3600.2	150420	26.433	185246	0.14972	14726	31452	60904	521
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(U)	3600.1	169780	1.2998	189340	0.018416	14600	18598	33200	8495
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(1)	3601.7	169685	19.403	178318	0.014741	14600	31198	60400	764
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(L)	3601.2	170204	6.662	178318	0.011461	14600	31198	45800	3364
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(P)	3600.4	170009	2.4206	187698	0.028508	14600	18598	33200	17259
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.5 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.6	Feasible Feasible	(STM) (U)	3600.1 3600.2	155932 169806	24.2 $0.71989$	187866 189988	0.12643 $0.020114$	$14600 \\ 14742$	31198 18743	60400 $33484$	463 9309
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(I)	3601.1	167311	16.502	179041	0.032229	14742	31485	60968	684
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(L)	3600.2	169878	6.577	179041	0.016015	14742	31485	46226	2641
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(P)	3600.6	169707	2.7266	188445	0.032607	14742	18743	33484	22698
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(STM)	3600.1	152361	24.535	188540	0.15763	14742	31485	60968	483
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(U)	3600.1	170297	0.95386	189813	0.017606	14600	18599	33200	13182
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(I)	3600.1	166685	14.543	178933	0.035387	14600	31199	60400	662
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7	Feasible Feasible	(L) (P)	3600.1 3600.4	170008 170038	6.276 $1.8167$	178933 $188255$	0.014455 $0.029928$	$14600 \\ 14600$	31199 18599	45800 33200	2654 19460
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(STM)	3600.4	153308	19.398	188496	0.029928	14600	31199	60400	565
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(U)	3600.2	168725	1.3088	189585	0.026082	14638	18638	33276	8734
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(I)	3600.3	166575	21.042	178654	0.034742	14638	31276	60552	578
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(L)	3600.1	169508	10.111	178654	0.01687	14638	31276	45914	2003
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(P)	3600.3	169640	1.9457	188076	0.03217	14638	18638	33276	24942
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(STM) (U)	3600.7 3600.3	152484 $170691$	16.456 $0.6589$	187950 189420	0.1538 $0.01534$	14638	31276	60552 $33192$	518 17490
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.9 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(I)	3600.3 3601.5	170691	0.6589 11.193	189420 178641	0.01534 $0.012808$	14596 $14596$	18597 $31193$	60384	17490 2183
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(L)	3600.7	170333	6.9569	178641	0.012308	14596	31193	45788	2587
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(P)	3600.2	170445	2.3876	187961	0.027571	14596	18597	33192	20492
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(STM)	3601	159644	20.287	187900	0.10299	14596	31193	60384	482
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(U)	3600.2	166156	1.1818	185971	0.018703	14619	18620	33238	9541
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(I)	3600.4	165644	18.044	174798	0.01682	14619	31239	60476	1082
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10	Feasible Feasible	(L) (P)	3600.7 $3600.5$	166288 166063	9.6085 $2.4466$	174798 $184257$	0.012729 $0.030099$	14619 $14619$	31239 18620	45857 $33238$	4722 $26519$
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(STM)	3601.2	149669	30.412	184468	0.15058	14619	31239	60476	641
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(U)	3600.4	169104	0.92586	187797	0.015541	14923	18923	33846	13864
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(I)	3600.8	167710	12.437	177118	0.020679	14923	31846	61692	664
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(L)	3600.7	167669	11.036	177118	0.020595	14923	31846	46769	861
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(P)	3600.3	168927	1.2608	186338	0.027162	14923	18923	33846	47860
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3600.8	151932	28.991	186289	0.14833	14923	31846	61692	463
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(U)	3600.2	166585	1.3548	186903	0.021752	14740	18739	33480	9695
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.12 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.12	Feasible Feasible	(I) (L)	3600.5 3600.9	164120 $165762$	21.345 9.8195	175806 175806	0.03292 $0.022214$	14740 $14740$	31479 $31479$	60960 $46220$	529 790
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(P)	3600.7	166584	3.9044	185324	0.033616	14740	18739	33480	42090
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(STM)	3600.6	151436	22.703	185235	0.14243	14740	31479	60960	481
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(U)	3600.5	167471	1.1278	187684	0.020947	14701	18702	33402	9355
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(I)	3601.3	164092	16.627	176615	0.037654	14701	31403	60804	708
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(L)	3600.9	167232	12.214	176615	0.017401	14701	31403	46103	927
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13	Feasible Feasible	(P) (STM)	3600.1 3601	167638 148416	1.2938 28.682	186246 186196	0.032402 $0.17432$	14701 $14701$	18702 31403	33402 60804	18500 507
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.13 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(U)	3600.1	163753	0.88087	182776	0.018357	14464	18463	32928	12142
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(I)	3601.6	160446	17.774	172334	0.035642	14464	30927	59856	584
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(L)	3600.8	163487	9.5565	172334	0.016092	14464	30927	45392	1800
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(P)	3600.1	163828	1.1508	181042	0.029598	14464	18463	32928	51111
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(STM)	3600.4	147570	17.156	181410	0.14743	14464	30927	59856	538
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(U)	3600.2	165556	1.2228	185393	0.021941	14537	18537	33074	9307
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.15 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.15	Feasible Feasible	(I) (L)	3601 3600.1	166190 166357	15.883 7.8678	174817 174817	0.01457 $0.013525$	14537 $14537$	31074 $31074$	60148 $45611$	1233 3734
c-n=2000-c=42-p=7-o=8-1=1-n=100-d=0.25.15 c-n=2000-c=42-p=7-o=8-1=1-h=100-d=0.25.15	Feasible Feasible	(L) (P)	3600.1	166233	2.1177	183705	0.013525	14537 $14537$	18537	33074	29488
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(STM)	3600.3	145147	26.829	184235	0.18356	14537	31074	60148	532
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(U)	3600.2	167655	1.1438	187411	0.021903	14602	18602	33204	7166
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(I)	3600.2	167828	21.064	176737	0.01717	14602	31204	60408	576
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(L)	3601.2	167633	11.859	176737	0.018016	14602	31204	45806	1076
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(P)	3600.7	168380	2.3606	185941	0.02871	14602	18602	33204	25567
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(STM)	3601.7	155739	20.912	185871	0.11774	14602	31204	60408	578
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17	Feasible Feasible	(U) (I)	3600.2 3601	165548 164336	1.1628 $14.422$	185105 $174312$	0.020836 $0.024009$	14653 $14653$	18654 $31307$	33306 60612	9136 575
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(L)	3600.7	165991	7.0459	174312	0.014009	14653	31307	45959	3002
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(P)	3600.1	165404	2.0547	183447	0.032663	14653	18654	33306	27099
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(STM)	3600.4	152022	22.762	183734	0.12923	14653	31307	60612	474
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(U)	3600	166703	0.96585	186082	0.01919	14432	18433	32864	9295
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(I)	3600.2	166768	9.9275	175237	0.014734	14432	30865	59728	1715
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(L)	3600.4	167022	9.9875	175237	0.012692	14432	30865	45296	3882
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(P)	3600.2	166816	2.9735	184428	0.029168	14432	18433	32864	18197
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(STM)	3600.3	153439	26.556	184699	0.1251	14432	30865	59728	468
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19	Feasible Feasible	(U) (I)	3601 $3600.2$	166505 $162151$	1.4228 $22.698$	185776 $175204$	0.021042 $0.044329$	$14614 \\ 14614$	18613 31227	33228 60456	7702 558
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19 c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(L)	3600.2	166876	8.4637	175204	0.013965	14614	31227	45842	2695
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(P)	3600.7	166243	3.6435	184228	0.032605	14614	18613	33228	12102
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(STM)	3600.5	154073	20.538	184294	0.12079	14614	31227	60456	508

			All In	stances - P							
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.0	Feasible Feasible	(U)	3600.4 3600.2	209194 209607	1.3758 21.788	233103 219407	0.017372 0.011511	17354 17354	22354 37208	39708 71916	8709 3577
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.0 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.0	Feasible Feasible	(I) (L)	3600.2 3601	209607	21.788 11.114	219407	0.011511 $0.011856$	17354	37208 37208	71916 54562	3577 2681
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(P)	3600.2	208966	4.4653	231057	0.029027	17354	22354	39708	20413
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(STM)	3600.6	190225	48.02	231190	0.13611	17354	37208	71916	514
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(U)	3600.1	207298	1.4288	233797	0.024167	17368	22365	39736	9503
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(I)	3600.3	204204	25.221	219324	0.034561	17368	37233	71972	575
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(L)	3600.6	208027	8.5867	219324	0.015548	17368	37233	54604	2908
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1	Feasible Feasible	(P)	3600.2 3600.1	208149 188605	3.8114 $21.755$	231601 231755	0.031883 $0.14417$	17368	22365	39736 $71972$	18480 515
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.1 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM) (U)	3600.1	210005	1.5638	234580	0.019826	17368 $17464$	37233 $22462$	39928	7298
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(I)	3601.4	206754	22.921	220737	0.031495	17464	37426	72356	613
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(L)	3600.9	209913	10.627	220737	0.015813	17464	37426	54892	1089
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(P)	3600.1	210439	3.3875	232542	0.028752	17464	22462	39928	22389
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM)	3600.1	185857	38.375	232508	0.17184	17464	37426	72356	512
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(U)	3600.3	206797	1.2678	230936	0.019009	17450	22449	39900	8340
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.3 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.3	Feasible Feasible	(I) (L)	3600.8 3601.1	204397 $207519$	21.166 $12.1$	217288 $217288$	0.027343 $0.011674$	17450 $17450$	37399 37399	72300 $54850$	624 1217
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(P)	3600.2	207535	3.7314	228855	0.02595	17450	22449	39900	20479
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(STM)	3600.4	191864	21.144	229039	0.11617	17450	37399	72300	554
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(U)	3600.3	207725	0.94286	231225	0.016772	17561	22560	40122	7864
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(I)	3600.4	206574	28.917	217772	0.01913	17561	37621	72744	775
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(L)	3600.4	208016	12.447	217772	0.011713	17561	37621	55183	3875
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(P)	3600.8	207377	4.7243	229025	0.029823	17561	22560	40122	17463
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.4 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.5	Feasible Feasible	(STM) (U)	$3600.5 \\ 3600.6$	185144 $207220$	36.677 $2.0967$	229644 $231151$	0.16065 $0.01895$	17561 $17502$	$\frac{37621}{22502}$	72744 $40004$	475 8086
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(I)	3600.4	203370	21.115	217591	0.033935	17502	37504	72508	607
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(L)	3600.7	204402	15.02	217591	0.028483	17502	37504	55006	706
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(P)	3600.4	207446	3.1295	229156	0.028004	17502	22502	40004	37961
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(STM)	3600.3	183963	29.735	229003	0.16614	17502	37504	72508	527
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(U)	3600.1	206310	1.8147	231378	0.021917	17583	22583	40166	9986
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.6 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.6	Feasible Feasible	(I) (L)	3601.2 3600.8	206389 207021	21.725 $10.784$	217255 $217255$	0.016082 $0.012982$	17583 17583	37666 37666	72832 55249	1029 2006
c-n=2500-c=44-p=7-o=8-1=1-n=100-d=0.25.6 c-n=2500-c=44-p=7-o=8-1=1-h=100-d=0.25.6	Feasible	(L) (P)	3600.8	206098	3.3015	229196	0.012982	17583	22583	40166	16091
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(STM)	3601.8	186789	33.477	229561	0.14515	17583	37666	72832	538
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(U)	3600.2	204831	2.0717	230692	0.025471	17471	22469	39942	6394
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(I)	3601	201355	23.375	216822	0.038261	17471	37440	72384	554
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(L)	3600.8	204301	11.868	216822	0.023203	17471	37440	54913	824
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(P)	3600.2	205961	1.9717	228588	0.030606	17471	22469	39942	23551
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.7 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.8	Feasible Feasible	(STM) (U)	3601.2 3600.3	181681 209403	54.639 $0.94186$	228504 $233655$	0.17428 $0.019189$	17471 $17546$	37440 $22543$	72384 $40092$	514 10390
c-n=2500-c=44-p=7-o=8-1=1-n=100-d=0.25.8 c-n=2500-c=44-p=7-o=8-1=1-h=100-d=0.25.8	Feasible	(I)	3600.3	205192	24.228	219909	0.035547	17546	37589	72684	528
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(L)	3601.1	207890	13.432	219909	0.021835	17546	37589	55138	793
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(P)	3600.1	209887	3.0235	231462	0.026944	17546	22543	40092	16753
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(STM)	3600.9	197028	24.543	231924	0.10043	17546	37589	72684	478
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(U)	3600.3	208263	1.1188	231571	0.017423	17454	22454	39908	8098
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(I)	3601.1 3601.4	206320 206617	22.505 15.389	218253 218253	0.023083	17454 $17454$	37408 37408	72316 54862	595 681
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.9 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(L) (P)	3600.3	208499	4.0974	218253	0.020993 $0.027155$	17454	37408 22454	39908	16892
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(STM)	3622.1	190113	44.05	229546	0.13185	17454	37408	72316	494
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(U)	3600.6	206874	1.6747	230682	0.01728	17473	22474	39946	3513
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(I)	3601.4	202786	20.451	217046	0.033397	17473	37447	72392	679
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(L)	3600.7	206753	8.5567	217046	0.01344	17473	37447	54919	2633
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(P)	3600.2	206724	3.5605	228668	0.029304	17473	22474	39946	24371
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.10 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11	Feasible Feasible	(STM) (U)	3600.2 3600.2	190499 207878	27.385 $1.7597$	228631 232023	0.12249 $0.019775$	17473 $17660$	37447 $22659$	72392 $40320$	529 8010
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(I)	3600.2	205800	24.886	218319	0.025724	17660	37819	73140	504
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(L)	3601.1	208414	8.7687	218319	0.012672	17660	37819	55480	2785
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(P)	3600.2	208308	3.7864	229950	0.027039	17660	22659	40320	15572
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3600.7	183785	35.192	230068	0.17111	17660	37819	73140	504
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(U)	3600.3	203303	1.6758	227080	0.01968	17347	22345	39694	7608
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(I)	3602.4	200725	24.495	213825	0.028976	17347	37192	71888	571
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.12 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.12	Feasible Feasible	(L) (P)	3600.2 3600.2	203739 203126	11.979 $6.0011$	213825 $224840$	0.012971 $0.032282$	17347 $17347$	37192 $22345$	54541 39694	1974 19291
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.12	Feasible	(STM)	3600.5	183869	55.748	225294	0.032282	17347	37192	71888	470
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(U)	3600.1	207458	1.6977	232040	0.01957	17901	22899	40802	8564
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(I)	3600.6	204402	25.267	218568	0.030774	17901	38300	74104	654
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(L)	3601.3	207753	13.521	218568	0.01385	17901	38300	56203	2574
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(P)	3600.5	207419	4.5343	229696	0.03194	17901	22899	40802	16271
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.13	Feasible	(STM)	3601.2	184332	40.246	230708	0.16869	17901	38300	74104	494
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.14 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.14	Feasible Feasible	(U)	3600.2 3601.4	205893 205666	1.4438 $18.112$	229949 $216765$	0.020711 $0.018259$	17542 $17542$	22542 37584	40084 72668	7306 698
c-n=2500-c=44-p=7-o=8-1=1-n=100-d=0.25.14 c-n=2500-c=44-p=7-o=8-1=1-h=100-d=0.25.14	Feasible	(I) (L)	3600.2	205666	8.2308	216765	0.018259 $0.014505$	17542	37584 37584	55126	1194
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(P)	3600.2	206778	3.0585	227877	0.02782	17542	22542	40084	25072
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.14	Feasible	(STM)	3600.6	183955	31.246	228241	0.16514	17542	37584	72668	497
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(U)	3600.2	203789	1.6847	228387	0.022252	17349	22346	39698	8300
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(I)	3600.9	200753	19.885	214863	0.034182	17349	37195	71896	481
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.15	Feasible	(L)	3600.9	204937	8.9396	214863	0.012492	17349	37195	54547	4195
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.15 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.15	Feasible Feasible	(P) (STM)	3600.3 3602.8	204661 180478	$3.6604 \\ 31.84$	226245 $226487$	0.02884 $0.17611$	17349 17349	22346 37195	39698 71896	16454 481
c-n=2000-c=44-p=1-0=6-1=1-n=100-d=0.25.15	reasible	(O 1 IVI)	3002.8	100410	31.04	440401	0.17011	11349	31190	11990	401

			All In	stances - P	art 7						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(U)	3600.2	210076	1.2408	234383	0.019668	17502	22501	40004	9662
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(I)	3601.8	206629	17.373	220478	0.032621	17502	37503	72508	627
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16	Feasible Feasible	(L) (P)	3601.1 3600.2	209072 209918	13.753 3.3995	220478 232190	0.019959 $0.031619$	17502 $17502$	37503 $22501$	55006 40004	805 28462
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.16	Feasible	(STM)	3600.2	187681	21.718	232548	0.031619	17502	37503	72508	596
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(U)	3600.7	205292	1.5538	230055	0.022009	17431	22431	39862	9918
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(I)	3601.5	205152	20.958	216415	0.018797	17431	37362	72224	892
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(L)	3601.6	206302	12.558	216415	0.012903	17431	37362	54793	3984
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(P)	3600.1	206196	3.1605	228102	0.028562	17431	22431	39862	25161
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.17	Feasible	(STM)	3601	185898	16.622	227854	0.14693	17431	37362	72224	491
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(U)	3600.4	204924	2.0057	229478	0.021494	17356	22357	39712	7311
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(I)	3600.8	202307	22.117	215818	0.030323	17356	37213	71924	667
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(L)	3601.1	204425	15.498	215818	0.019023	17356	37213	54568	892
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(P)	3600.8	205597	5.1022	227323	0.029644	17356	22357	39712	19310
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.18	Feasible	(STM)	3601.1	188467 205389	28.732	227420	0.1281	17356	37213	71924	487 7680
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.19 c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.19	Feasible Feasible	(U) (I)	3600.1 3601.8	202146	2.1457 $29.756$	229781 216331	0.020862 $0.032562$	17564 $17564$	22563 $37627$	40128 $72756$	493
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(L)	3600.2	206016	9.7955	216331	0.012899	17564	37627	55192	1836
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(P)	3600.2	205835	3.0705	227874	0.03022	17564	22563	40128	19479
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25.19	Feasible	(STM)	3601	183200	40.961	227891	0.16766	17564	37627	72756	493
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(U)	3600.4	255508	3.5535	284908	0.018609	22097	28096	50194	6750
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(I)	3600.4	248155	33.746	268331	0.044533	22097	47193	91388	481
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(L)	3600.6	250857	14.911	268331	0.032953	22097	47193	69291	534
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(P)	3600.4	255519	2.6876	282533	0.030858	22097	28096	50194	26531
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.0	Feasible	(STM)	3602	219281	39.862	282663	0.21311	22097	47193	91388	481
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(U)	3600.1	248406	2.0987	277269	0.020228	22110	28107	50220	6112
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.1	Feasible	(I)	3602.1	241522	32.852	261087	0.044572	22110	47217	91440	477
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.1 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.1	Feasible Feasible	(L) (P)	3600.4 3600.9	244500 $248236$	23.131 6.373	261087 274907	0.031512 $0.032695$	22110 22110	47217 28107	69330 50220	537 10273
c-n=3000-c=45-p=7-o=8-l=1-n=100-d=0.25.1 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.1	Feasible Feasible	(STM)	3600.9	189805	75.921	274998	0.032695	22110	47217	91440	477
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(U)	3600.1	252800	1.6078	282116	0.021352	22321	28322	50642	8106
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(I)	3601.6	247215	45.762	265752	0.041074	22321	47643	92284	467
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(L)	3600.8	249878	21.09	265752	0.028725	22321	47643	69963	567
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(P)	3600.2	253671	6.79	279813	0.028532	22321	28322	50642	10585
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.2	Feasible	(STM)	3600.2	226954	67.675	279787	0.1675	22321	47643	92284	467
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(U)	3601.1	249207	1.9357	279517	0.021749	21961	27960	49922	7873
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(I)	3600.7	241803	44.24	262761	0.049589	21961	46921	90844	460
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(L)	3600.8	244083	18.903	262761	0.037841	21961	46921	68883	534
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(P)	3600.8	245710	6.786	277065	0.049202	21961	27960	49922	9914
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.3	Feasible	(STM)	3601.3	196929	51.208	276958	0.32905	21961	46921	90844	470
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(U)	3601.2	251744	2.4476	280996	0.018167	22159	28156	50318	5640
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4	Feasible Feasible	(I)	3600.7 3600.8	251002 $248374$	30.571 $20.223$	264361 264361	0.017983	22159 $22159$	47315 47315	91636 $69477$	503 603
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4	Feasible Feasible	(L) (P)	3600.8	248374	7.4669	278597	0.027021 $0.032985$	22159	28156	50318	11340
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.4	Feasible	(STM)	3602.4	220843	82.691	278612	0.19329	22159	47315	91636	401
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(U)	3600.2	251052	1.8327	281465	0.024634	22028	28029	50056	7600
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(I)	3600.2	246512	29.076	265388	0.039478	22028	47057	91112	514
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(L)	3600.6	247010	22.727	265388	0.036977	22028	47057	69084	536
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(P)	3600.2	251955	8.0968	279288	0.034002	22028	28029	50056	11467
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.5	Feasible	(STM)	3601.1	219957	49.166	278981	0.19314	22028	47057	91112	514
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(U)	3600.1	249887	1.3948	279970	0.021271	22155	28155	50310	7764
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(I)	3604.3	241085	26.91	263244	0.053966	22155	47310	91620	480
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(L)	3600.4	242854	15.324	263244	0.046267	22155	47310	69465	515
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.6	Feasible	(P)	3601.2	249951 208246	7.4009 48.766	277753 277822	0.033525	22155 22155	28155	50310 91620	15531 480
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.6 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.7	Feasible Feasible	(STM) (U)	3602.5 3600.6	208246 $248307$	48.766 1.3268	277822 278219	0.2502 $0.022954$	$\frac{22155}{22097}$	47310 28096	91620 50194	480 4033
c-n=3000-c=45-p=7-0=8-1=1-n=100-d=0.25.7 c-n=3000-c=45-p=7-0=8-1=1-h=100-d=0.25.7	Feasible Feasible	(I)	3600.6	248307	47.131	262011	0.050284	22097	47193	91388	4033
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.7 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(L)	3600.8	244680	16.573	262011	0.033047	22097	47193	69291	554
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(P)	3600.3	248824	3.6884	275787	0.033244	22097	28096	50194	16380
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.7	Feasible	(STM)	3602.4	217138	88.01	275850	0.20354	22097	47193	91388	301
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(U)	3600.7	251620	2.4026	280457	0.018372	22070	28071	50140	9701
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(I)	3606.7	247119	30.701	264026	0.033	22070	47141	91280	456
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(L)	3600.8	247353	16.148	264026	0.031635	22070	47141	69210	526
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(P)	3601.1	251224	6.9949	278163	0.032124	22070	28071	50140	10692
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.8	Feasible	(STM)	3602	221599	51.075	278285	0.17804	22070	47141	91280	456
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9	Feasible	(U)	3600.2	253374	2.3167	282630	0.018473	22223	28220	50446	5762
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(I)	3601.6 3601.3	246075 $247616$	28.719 $14.628$	266026 266026	0.045444 $0.037499$	22223 $22223$	47443 $47443$	91892 69669	495 586
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(L) (P)	3601.3	247616 $252732$	14.628 5.3032	266026 280328	0.037499 $0.033418$	22223	47443 28220	50446	28462
c-n=3000-c=45-p=7-o=8-l=1-n=100-d=0.25.9 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9	Feasible Feasible	(STM)	3600.9	252732	42.045	280328	0.033418	22223	47443	91892	495
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.9 c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(U)	3600.2	256021	2.3956	284781	0.01662	22159	28158	50318	5623
c-n=3000-c=45-p=7-0=8-l=1-h=100-d=0.25.10	Feasible	(I)	3600.2	250114	29.083	268469	0.037073	22159	47317	91636	503
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(L)	3601.3	252793	13.737	268469	0.025683	22159	47317	69477	605
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(P)	3601.3	255179	4.3203	282292	0.032975	22159	28158	50318	11642
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.10	Feasible	(STM)	3601.6	230406	65.506	282997	0.161	22159	47317	91636	301
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(U)	3600.2	251225	2.4586	280423	0.020233	22155	28152	50310	5126
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(I)	3600.1	244888	32.134	264165	0.042081	22155	47307	91620	477
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(L)	3602.3	248584	22.776	264165	0.026249	22155	47307	69465	783
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(P)	3600.8	251125	6.0981	278068	0.032845	22155	28152	50310	16528
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25.11	Feasible	(STM)	3608.9	221683	63.851	278168	0.18083	22155	47307	91620	477

				Table wit	h Means and	Standard De	viations					
group	formulation	optimal	feasible	time	time_d	relax_time	relax_time_d	nodes	nodes_d	gap	gap_d	gap_improvement
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.1	0.059689	0.12803	0.024026	53778	13995	0.013469	0.0022689	0.09469
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25	(I) (L)	0	20	3600.2	0.086445	1.9567	0.48518	14090	2810.8	0.011434	0.0019363	0.038813
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25	(L)	0	20	3600.1	0.05792	1.064	0.26375	25347	7524.3	0.010701	0.0018504	0.039499
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25	(P)	0	20	3600.1	0.040679	0.3392	0.070988	1.0647e + 05	25965	0.021986	0.0029188	0.08275
c-n=500-c=31-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3600.2	0.084617	2.7211	0.74923	11822	4169.1	0.035986	0.0044023	0.071537
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.2	0.10627	0.36075	0.071963	24809	7487.5	0.014808	0.0012095	0.092069
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25	(I)	0	20	3600.4	0.26237	5.4621	1.2344	6976.1	2241.3	0.012446	0.0018357	0.036171
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25	(L)	0	20	3600.3	0.1702	2.7268	0.7081	10609	3014	0.011355	0.0012702	0.036516
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25	(P)	0	20	3600.2	0.07877	0.81393	0.22732	59640	16844	0.023774	0.0016154	0.078457
c-n=1000-c=37-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3600.5	0.20565	5.937	1.2031	5625.4	873.42	0.039399	0.004783	0.071247
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.3	0.1639	0.58826	0.14816	14585	4100.8	0.016339	0.0030285	0
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25	(I) (L)	0	20	3600.6	0.37894	10.027	2.0986	3102.1	722.43	0.013303	0.001717	0
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25	(L)	0	20	3600.4	0.18995	4.7122	1.1074	4881.9	1634.7	0.011935	0.0013752	0
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25	(P)	0	20	3600.3	0.13159	1.6777	0.42179	35800	11025	0.026231	0.0020659	0
c-n=1500-c=40-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3600.8	0.33665	13.064	2.6977	2095.9	1868.2	0.089055	0.043355	0
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.3	0.21117	1.1088	0.22047	9775.9	2528.4	0.019832	0.0023813	0
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25	(I)	0	20	3600.8	0.53787	17.311	3.6539	1022.2	872.21	0.02556	0.010505	0
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25	(L) (P)	0	20	3600.7	0.33292	9.012	1.8957	2413.1	1076.6	0.015195	0.0026695	0
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25		0	20	3600.4	0.2	2.3658	0.70875	26432	11220	0.03014	0.0019557	0
c-n=2000-c=42-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3601.5	3.7479	23.635	4.0282	519.1	45.605	0.14542	0.020848	0
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.3	0.17322	1.5753	0.35088	8127	1475	0.02017	0.0022087	0
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25	(I)	0	20	3601	0.58116	22.813	3.0367	787.15	653.08	0.027828	0.0073405	0
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25	(L)	0	20	3600.9	0.38032	11.648	2.2898	1982.6	1138.6	0.015941	0.0045838	0
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25	(P)	0	20	3600.3	0.18466	3.7489	0.86486	20996	5273.2	0.029441	0.0019859	0
c-n=2500-c=44-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3601.9	4.6767	34.105	10.656	508.15	29.449	0.1499	0.02119	0
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25	(U)	0	20	3600.4	0.3488	2.1039	0.51239	6443.6	1358.6	0.020472	0.0026929	0
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25	(I)	0	20	3601.5	1.5794	33.846	8.3397	493.05	38.457	0.03931	0.010182	0
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25	(L)	0	20	3600.8	0.46709	17.707	3.0859	579.35	67.086	0.031078	0.0062642	0
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25	(P)	0	20	3600.7	0.37182	5.7806	1.5405	15751	5677.4	0.033052	0.0040813	0
c-n=3000-c=45-p=7-o=8-l=1-h=100-d=0.25	(STM)	0	20	3603.8	8.3602	62.845	22.504	443.2	64.961	0.20008	0.054315	0

## 2 Neighborhood Model

filename	-4	£1 ( )	time		stances - Part				1		nodes
n-n=500-h=3-d=8-m=10.0	status Feasible	formulation (U)	3600	value 749378	relax_time 0.16698	relax_value 797992	gap 0.011781	edges 3770	columns 4771	rows 8540	79236
n-n=500-h=3-d=8-m=10.0 n-n=500-h=3-d=8-m=10.0	Feasible	(I)	3600.3	749284	1.6607	773531	0.011781	3770	8041	15580	43687
n-n=500-h=3-d=8-m=10.0	Feasible	(L)	3600.3	749378	0.6689	773531	0.010303	3770	8041	11810	59872
n-n=500-h=3-d=8-m=10.0	Feasible	(P)	3600.1	749378	0.39294	791073	0.018168	3770	4771	8540	197412
n-n=500-h=3-d=8-m=10.0	Feasible	(STM)	3600.1	749279	1.6847	786138	0.021581	3770	8041	15580	27283
n-n=500-h=3-d=8-m=10.1	Feasible	(U)	3600.1	477611	0.22297	530745	0.0099249	3857	4858	8714	65903
n-n=500-h=3-d=8-m=10.1	Feasible	(I)	3600.4	477600	1.6698	501298	0.0084972	3857	8215	15928	38279
n-n=500-h=3-d=8-m=10.1	Feasible	(L)	3600.1	477611	0.92486	501298	0.007789	3857	8215	12071	66471
n-n=500-h=3-d=8-m=10.1	Feasible	(P)	3600.1	477611	0.33995	521571	0.021033	3857	4858	8714	117003
n-n=500-h=3-d=8-m=10.1	Feasible	(STM)	3600.1	477592	2.5116	514568	0.024067	3857	8215	15928	38983
n-n=500-h=3-d=8-m=10.2	Feasible	(U)	3600.2	444890	0.17997	493919	0.011112	3746	4747	8492	61671
n-n=500-h=3-d=8-m=10.2	Feasible	(I)	3600.2	444890	1.4118	466365	0.010174	3746	7993	15484	38373
n-n=500-h=3-d=8-m=10.2	Feasible	(L)	3600.2	444890	0.91986	466365	0.0099228	3746	7993	11738	63287
n-n=500-h=3-d=8-m=10.2	Feasible	(P)	3600.1	444890	0.37994	486423	0.02279	3746	4747	8492	103780
n-n=500-h=3-d=8-m=10.2	Feasible	(STM)	3600.2	444430	1.7937	482328	0.030092	3746	7993	15484	46173
n-n=500-h=3-d=8-m=10.3	Feasible	(U)	3600.2	469168	0.16498	523299	0.01208	3896	4896	8792	68784
n-n=500-h=3-d=8-m=10.3	Feasible	(I)	3600	469168	1.7007	493895	0.012152	3896	8292	16084	51915
n-n=500-h=3-d=8-m=10.3	Feasible	(L)	3600.1	469168	1.1878	493895	0.012085	3896	8292	12188	50203
n-n=500-h=3-d=8-m=10.3	Feasible	(P)	3600.1	469168	0.47493	514216	0.026861	3896	4896	8792	120784
n-n=500-h=3-d=8-m=10.3	Feasible	(STM)	3600.1	469124	3.0845	507539	0.029496	3896	8292	16084	39184
n-n=500-h=3-d=8-m=10.4	Feasible	(U)	3600.1	415400	0.14598	469744	0.016332	3611	4612	8222	104921
n-n=500-h=3-d=8-m=10.4	Feasible	(I)	3600.2	415367	1.4058	442677	0.017173	3611	7723	14944	48898
n-n=500-h=3-d=8-m=10.4	Feasible	(L)	3600.2	415400	0.62991	442677	0.015486	3611	7723	11333	72287
n-n=500-h=3-d=8-m=10.4	Feasible	(P)	3600	415387	0.24496	461803	0.031653	3611	4612	8222	128770
n-n=500-h=3-d=8-m=10.4	Feasible	(STM)	3600.2	415028	2.2946	457515	0.038642	3611	7723	14944	37598
n-n=500-h=3-d=8-m=10.5	Feasible	(U)	3600	450970	0.29296	506176	0.018857	3816	4817	8632	60789
n-n=500-h=3-d=8-m=10.5	Feasible	(1)	3600.2	450912	1.2428	477824	0.017622	3816	8133	15764	58403
n-n=500-h=3-d=8-m=10.5	Feasible	(L)	3600.1	450970	1.3548	477824	0.017576	3816	8133	11948	44424
n-n=500-h=3-d=8-m=10.5	Feasible	(P)	3600.1	450970	0.48293	497434	0.033099	3816	4817	8632	206515
n-n=500-h=3-d=8-m=10.5	Feasible	(STM)	3600.1	450946	1.5828	491988	0.036924	3816	8133	15764	45803
n-n=500-h=3-d=8-m=10.6	Feasible	(U)	3600.1	441002	0.18697	489990	0.01194	3744	4745	8488	77437
n-n=500-h=3-d=8-m=10.6	Feasible	(I)	3600.3	441002	1.4018	461746	0.0097332	3744	7989	15476	102391
n-n=500-h=3-d=8-m=10.6	Feasible	(L)	3600.1	441002	1.2088	461746	0.0092623	3744	7989	11732	72787
n-n=500-h=3-d=8-m=10.6 n-n=500-h=3-d=8-m=10.6	Feasible Feasible	(P) (STM)	3600 3600.1	441002 $440802$	$0.46093 \\ 1.7127$	481855 $476998$	0.023014 $0.028116$	$3744 \\ 3744$	4745 7989	$8488 \\ 15476$	95354 34301
n-n=500-h=3-d=8-m=10.6 n-n=500-h=3-d=8-m=10.7	Feasible	(U)	3600.1	435276	0.14398	482232	0.028116	3817	4818	8634	61071
n-n=500-h=3-d=8-m=10.7	Feasible	(I)	3600.1	435276	1.6487	454827	0.010652	3817	8135	15768	48209
n-n=500-h=3-d=8-m=10.7 n-n=500-h=3-d=8-m=10.7	Feasible	(L)	3600.2	435276	0.85387	454827	0.0082714	3817	8135	11951	68532
n-n=500-h=3-d=8-m=10.7	Feasible	(P)	3600.1	435276	0.44293	474405	0.021071	3817	4818	8634	101468
n-n=500-h=3-d=8-m=10.7	Feasible	(STM)	3600.1	435276	1.7417	469478	0.021071	3817	8135	15768	37109
n-n=500-h=3-d=8-m=10.8	Feasible	(U)	3600.1	414763	0.17197	464281	0.016653	3933	4933	8866	66515
n-n=500-h=3-d=8-m=10.8	Feasible	(I)	3600.3	414753	1.6957	437565	0.014727	3933	8366	16232	58489
n-n=500-h=3-d=8-m=10.8	Feasible	(L)	3600.3	414763	1.1848	437565	0.014885	3933	8366	12299	54376
n-n=500-h=3-d=8-m=10.8	Feasible	(P)	3600.3	414763	0.37594	457470	0.029727	3933	4933	8866	135615
n-n=500-h=3-d=8-m=10.8	Feasible	(STM)	3600.2	414685	2.1697	452750	0.036687	3933	8366	16232	33089
n-n=500-h=3-d=8-m=10.9	Feasible	(U)	3600.1	397062	0.17997	450432	0.018891	3721	4721	8442	72510
n-n=500-h=3-d=8-m=10.9	Feasible	(I)	3600.1	397062	2.2986	422034	0.015944	3721	7942	15384	43780
n-n=500-h=3-d=8-m=10.9	Feasible	(L)	3600.1	397062	0.85287	422034	0.015229	3721	7942	11663	64396
n-n=500-h=3-d=8-m=10.9	Feasible	(P)	3600.1	397068	0.35695	442687	0.033655	3721	4721	8442	136099
n-n=500-h=3-d=8-m=10.9	Feasible	(STM)	3600.1	396529	1.8447	436703	0.039947	3721	7942	15384	28904
n-n=500-h=3-d=8-m=10.10	Feasible	(U)	3600.1	450674	0.16098	503052	0.014974	3750	4750	8500	79175
n-n=500-h=3-d=8-m=10.10	Feasible	(I)	3600.1	450628	0.99685	474867	0.013657	3750	8000	15500	45296
n-n=500-h=3-d=8-m=10.10	Feasible	(L)	3600.2	450647	0.99385	474867	0.012221	3750	8000	11750	52174
n-n=500-h=3-d=8-m=10.10	Feasible	(P)	3600.1	450628	0.43593	494562	0.027822	3750	4750	8500	120491
n-n=500-h=3-d=8-m=10.10	Feasible	(STM)	3600.2	450208	1.7707	488854	0.032804	3750	8000	15500	55096
n-n=500-h=3-d=8-m=10.11	Feasible	(U)	3600.1	468958	0.18897	519623	0.013213	3682	4683	8364	67663
n-n=500-h=3-d=8-m=10.11	Feasible	(I)	3600	468958	1.9927	490416	0.011339	3682	7865	15228	42541
n-n=500-h=3-d=8-m=10.11	Feasible	(L)	3600.2	468958	1.0528	490416	0.0099463	3682	7865	11546	63811
n-n=500-h=3-d=8-m=10.11	Feasible	(P)	3600.1	468958	0.43793	510687	0.024522	3682	4683	8364	129563
n-n=500-h=3-d=8-m=10.11	Feasible	(STM)	3600.3	468498	2.0147	503902	0.025171	3682	7865	15228	36700
n-n=500-h=3-d=8-m=10.12	Feasible	(U)	3600.1	470834	0.14098	516918	0.0092496	3703	4704	8406	68686
n-n=500-h=3-d=8-m=10.12	Feasible	(1)	3600.3	470834	1.5948	491930	0.0087354	3703	7907	15312	54925
n-n=500-h=3-d=8-m=10.12	Feasible	(L)	3600.2	470834	0.88987	491930	0.0088212	3703	7907	11609	52202
n-n=500-h=3-d=8-m=10.12	Feasible	(P)	3600.1	470833	0.35395	508645	0.018641	3703	4704	8406	132286
n-n=500-h=3-d=8-m=10.12	Feasible	(STM)	3600.1	470834	2.1477	505553	0.023871	3703	7907	15312	43725
n-n=500-h=3-d=8-m=10.13	Feasible	(U)	3600.1	384179	0.14298	441477	0.024046	3732	4730	8464	64575
n-n=500-h=3-d=8-m=10.13	Feasible	(I)	3600.4	384012	2.0447	412759	0.021377	3732	7962	15428	32466
n-n=500-h=3-d=8-m=10.13	Feasible	(L)	3600.3	384158	0.77688	412759	0.019742	3732	7962	11696	67409
n-n=500-h=3-d=8-m=10.13 n-n=500-h=3-d=8-m=10.13	Feasible	(P)	3600.1	384150 384062	0.37294	434000 427562	0.041066	3732	4730	8464	108975 53821
	Feasible	(STM)	3600.1		0.97585		0.04606	3732	7962	15428	
n-n=500-h=3-d=8-m=10.14	Feasible	(U)	3600.1	432931	0.16997	485826	0.013814	3647	4648	8294	70911
n-n=500-h=3-d=8-m=10.14	Feasible	(I)	3600.3	432849	1.5758	456569	0.011012	3647	7795	15088	48799
n-n=500-h=3-d=8-m=10.14	Feasible	(L) (P)	3600.1	432931	0.62491	456569	0.011283	3647	7795	11441	93671
n-n=500-h=3-d=8-m=10.14 n-n=500-h=3-d=8-m=10.14	Feasible Feasible	(P) (STM)	3600.1 3600.2	432870 $432701$	0.52892 $2.9166$	477366 $470279$	0.025764 $0.031907$	$3647 \\ 3647$	4648 7795	8294 15088	110847 43099
n-n=500-h=3-d=8-m=10.15 n-n=500-h=3-d=8-m=10.15	Feasible	(U)	3600.1 3600.1	422050 $422050$	0.16897	475065	0.015108 $0.0132$	3773 3773	4773 8046	8546	63220 37399
	Feasible	(I)			0.83587	445138			8046 8046	15592	37399 40986
n-n=500-h=3-d=8-m=10.15 n-n=500-h=3-d=8-m=10.15	Feasible Feasible	(L) (P)	3600.2 3600.1	422050 $422050$	1.0898 $0.52292$	445138 $465778$	0.01313 $0.027196$	3773 3773	4773	11819 8546	126520
n-n=500-n=3-d=8-m=10.15 n-n=500-h=3-d=8-m=10.15	Feasible	(STM)	3600.1	422050	2.1837	458910	0.027196	3773	4773 8046	15592	38499
n-n=300-n=3-d=8-m=10.13	reasible	(01111)	3000.2	421900	2.1001	400910	0.033931	3113	0040	10092	30499

					nces - Part 2						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=500-h=3-d=8-m=10.16	Feasible	(U)	3600.1	485334	0.12098	536960	0.011401	3672	4673	8344	90061
n-n=500-h=3-d=8-m=10.16	Feasible	(I)	3600.1	485331	1.3008	508055	0.0097792	3672	7845	15188	66714
n-n=500-h=3-d=8-m=10.16	Feasible	(L)	3600.2	485334	0.72389	508055	0.0099513	3672	7845	11516	47041
n-n=500-h=3-d=8-m=10.16	Feasible	(P)	3600.1	485334	0.53792	528118	0.02211	3672	4673	8344	131328
n-n=500-h=3-d=8-m=10.16	Feasible	(STM)	3600.2	485331	2.5846	519920	0.025331	3672	7845	15188	47513
n-n=500-h=3-d=8-m=10.17	Feasible	(U)	3600	474130	0.21997	526643	0.010256	3835	4836	8670	57324
n-n=500-h=3-d=8-m=10.17	Feasible	(I)	3600.4	474130	1.8307	497528	0.0071369	3835	8171	15840	30482
n-n=500-h=3-d=8-m=10.17	Feasible	(L)	3600.3	474130	1.1928	497528	0.0067865	3835	8171	12005	61089
n-n=500-h=3-d=8-m=10.17	Feasible	(P)	3600.1	474130	0.35495	517498	0.019156	3835	4836	8670	126423
n-n=500-h=3-d=8-m=10.17	Feasible	(STM)	3600.3	473951	2.4726	511567	0.027358	3835	8171	15840	53882
n-n=500-h=3-d=8-m=10.18	Feasible	(U)	3600.1	483009	0.11698	536829	0.016324	3838	4838	8676	105840
n-n=500-h=3-d=8-m=10.18	Feasible	(I)	3600.1	483185	1.5368	507725	0.013498	3838	8176	15852	73570
n-n=500-h=3-d=8-m=10.18	Feasible	(L)	3600.1	483082	0.72289	507725	0.014	3838	8176	12014	70381
n-n=500-h=3-d=8-m=10.18	Feasible	(P)	3600.1	483208	0.38194	528414	0.025541	3838	4838	8676	145740
n-n=500-h=3-d=8-m=10.18	Feasible	(STM)	3600.3	482931	2.7396	519158	0.030269	3838	8176	15852	39599
n-n=500-h=3-d=8-m=10.19	Feasible	(U)	3600.1	435034	0.20497	485669	0.014833	3901	4901	8802	72059
n-n=500-h=3-d=8-m=10.19	Feasible	(I)	3600.3	435020	2.0257	458674	0.013098	3901	8302	16104	64838
n-n=500-h=3-d=8-m=10.19	Feasible	(L)	3600.3	435034	1.5288	458674	0.012781	3901	8302	12203	80006
n-n=500-h=3-d=8-m=10.19	Feasible	(P)	3600.1	434997	0.52492	477802	0.028917	3901	4901	8802	142759
n-n=500-h=3-d=8-m=10.19	Feasible	(STM)	3600.2	434993	2.7036	473166	0.032531	3901	8302	16104	37127
n-n=1000-h=3-d=8-m=10.0	Feasible	(U)	3600.2	1.1952e+06	0.56591	1.3401e+06	0.018663	7750	9750	17500	36986
n-n=1000-h=3-d=8-m=10.0	Feasible	(I)	3600.9	1.195e+06	7.3789	1.2633e+06	0.015395	7750	16500	32000	16751
n-n=1000-h=3-d=8-m=10.0	Feasible	(L)	3600.7	1.1949e+06	4.0564	1.2633e+06	0.015355	7750	16500	24250	26961
n-n=1000-h=3-d=8-m=10.0 n-n=1000-h=3-d=8-m=10.0	Feasible	(E) (P)	3600.7	1.1949e+06 1.195e+06	1.4248	1.3164e+06	0.013118	7750	9750	17500	71386
n-n=1000-h=3-d=8-m=10.0	Feasible	(STM)	3600.3	1.193e+06 1.1948e+06	6.287	1.3033e+06	0.034022	7750	16500	32000	14116
n-n=1000-h=3-d=8-m=10.0 n-n=1000-h=3-d=8-m=10.1	Feasible	(U)	3600.1	1.1948e+06 1.2625e+06	0.49293	1.4058e+06	0.037363	7791	9791	17582	51174
n-n=1000-h=3-d=8-m=10.1 n-n=1000-h=3-d=8-m=10.1	Feasible		3600.9		7.3389		0.010248	7791		32164	18382
n-n=1000-n=3-d=8-m=10.1 n-n=1000-h=3-d=8-m=10.1	Feasible	(I) (L)	3600.9	1.2622e+06 1.2619e+06	2.3696	1.326e+06 1.326e+06	0.013893	7791	16582 $16582$	24373	18382 41191
n-n=1000-h=3-d=8-m=10.1	Feasible Feasible	(P) (STM)	3600.3 3600.1	1.2621e+06 1.2609e+06	1.4298 $7.4759$	1.3824e+06 1.3665e+06	0.029139 $0.03282$	7791 7791	9791 $16582$	17582 32164	60074 $15127$
n-n=1000-h=3-d=8-m=10.1											
n-n=1000-h=3-d=8-m=10.2	Feasible	(U)	3600	1.1301e+06	0.36794	1.2727e + 06	0.016975	7636	9634	17272	53137
n-n=1000-h=3-d=8-m=10.2	Feasible	(I)	3600.5	1.1301e+06	4.2324	1.1956e + 06	0.014386	7636	16270	31544	31320
n-n=1000-h=3-d=8-m=10.2	Feasible	(L)	3600.7	1.1295e + 06	3.2425	1.1956e + 06	0.014816	7636	16270	23908	29251
n-n=1000-h=3-d=8-m=10.2	Feasible	(P)	3600.2	1.1301e+06	1.0189	1.2501e + 06	0.034015	7636	9634	17272	67792
n-n=1000-h=3-d=8-m=10.2	Feasible	(STM)	3600.1	1.13e + 06	3.2615	1.2313e + 06	0.035159	7636	16270	31544	22007
n-n=1000-h=3-d=8-m=10.3	Feasible	(U)	3600.2	1.2225e+06	0.60691	1.3679e + 06	0.019501	7564	9560	17128	48104
n-n=1000-h=3-d=8-m=10.3	Feasible	(I)	3600.7	1.222e+06	5.4822	1.2896e + 06	0.015752	7564	16124	31256	24676
n-n=1000-h=3-d=8-m=10.3	Feasible	(L)	3600.6	1.2221e + 06	3.4065	1.2896e + 06	0.016257	7564	16124	23692	25372
n-n=1000-h=3-d=8-m=10.3	Feasible	(P)	3600.2	1.2219e + 06	1.5318	1.3438e + 06	0.032874	7564	9560	17128	56704
n-n=1000-h=3-d=8-m=10.3	Feasible	(STM)	3600.4	1.2221e + 06	6.0361	1.3302e + 06	0.038006	7564	16124	31256	13176
n-n=1000-h=3-d=8-m=10.4	Feasible	(U)	3600.1	1.365e + 06	0.45493	1.5118e + 06	0.016786	7711	9712	17422	37722
n-n=1000-h=3-d=8-m=10.4	Feasible	(I)	3601.2	1.3646e + 06	5.2572	1.4339e + 06	0.014399	7711	16423	31844	14788
n-n=1000-h=3-d=8-m=10.4	Feasible	(L)	3600.6	1.3643e + 06	3.3925	1.4339e + 06	0.014793	7711	16423	24133	18997
n-n=1000-h=3-d=8-m=10.4	Feasible	(P)	3600.1	1.3646e + 06	1.2538	1.488e + 06	0.030848	7711	9712	17422	46644
n-n=1000-h=3-d=8-m=10.4	Feasible	(STM)	3600.2	1.3634e + 06	8.0138	1.4754e + 06	0.033953	7711	16423	31844	10222
n-n=1000-h=3-d=8-m=10.5	Feasible	(U)	3600.2	1.2293e+06	0.41794	1.3738e + 06	0.017814	7652	9653	17304	48203
n-n=1000-h=3-d=8-m=10.5	Feasible	(I)	3600.5	1.229e + 06	4.6193	1.2957e + 06	0.015759	7652	16305	31608	16884
n-n=1000-h=3-d=8-m=10.5	Feasible	(L)	3600.7	1.2287e+06	3.4565	1.2957e+06	0.015529	7652	16305	23956	36512
n-n=1000-h=3-d=8-m=10.5	Feasible	(P)	3600.2	1.2277e+06	0.77188	1.3507e+06	0.03298	7652	9653	17304	131603
n-n=1000-h=3-d=8-m=10.5	Feasible	(STM)	3600.1	1.2284e+06	6.711	1.3347e+06	0.035732	7652	16305	31608	14950
n-n=1000-h=3-d=8-m=10.6	Feasible	(U)	3600.3	1.2757e+06	0.50192	1.4272e+06	0.018733	7442	9443	16884	37588
n-n=1000-h=3-d=8-m=10.6	Feasible	(I)	3600.5	1.2748e+06	3.3745	1.346e+06	0.016401	7442	15885	30768	24004
n-n=1000-h=3-d=8-m=10.6	Feasible	(L)	3600.3	1.2748e+06 1.2747e+06	2.9705	1.346e+06	0.016401	7442	15885	23326	37033
n-n=1000-h=3-d=8-m=10.6	Feasible	(E)	3600.1	1.2747e+06 1.2754e+06	1.1828	1.4047e+06	0.010003	7442	9443	16884	57513
n-n=1000-h=3-d=8-m=10.6 n-n=1000-h=3-d=8-m=10.6	Feasible	(STM)	3600.1	1.2754e+06 1.274e+06	5.0052	1.3829e+06	0.033218	7442	15885	30768	10444
n-n=1000-n=3-d=8-m=10.6 n-n=1000-h=3-d=8-m=10.7	Feasible										
n-n=1000-n=3-d=8-m=10.7 n-n=1000-h=3-d=8-m=10.7	Feasible	(U) (I)	3600.2 3600.1	1.2362e+06 1.2356e+06	0.42294 $6.521$	1.374e+06 1.3054e+06	0.019759 $0.018151$	7780 7780	9781 $16561$	17560 $32120$	57297 $14567$
n-n=1000-h=3-d=8-m=10.7	Feasible	(L)	3600.1	1.2361e+06	4.0404	1.3054e+06	0.017303	7780	16561	24340 17560	20650
n-n=1000-h=3-d=8-m=10.7	Feasible	(P)	3600.6	1.2363e+06	1.6178	1.3536e+06	0.034648	7780	9781		46097
n-n=1000-h=3-d=8-m=10.7	Feasible	(STM)	3600.2	1.2355e+06	6.559	1.3377e+06	0.036825	7780	16561	32120	14070
n-n=1000-h=3-d=8-m=10.8	Feasible	(U)	3600	1.2724e+06	0.40994	1.4096e+06	0.014265	7613	9614	17226	61452
n-n=1000-h=3-d=8-m=10.8	Feasible	(I)	3600.9	1.2721e + 06	5.8711	1.3355e + 06	0.012219	7613	16227	31452	19165
n-n=1000-h=3-d=8-m=10.8	Feasible	(L)	3600.4	1.272e + 06	2.2896	1.3355e+06	0.011761	7613	16227	23839	37692
n-n=1000-h=3-d=8-m=10.8	Feasible	(P)	3600.2	1.272e + 06	1.5678	1.3884e + 06	0.028353	7613	9614	17226	51521
n-n=1000-h=3-d=8-m=10.8	Feasible	(STM)	3600.2	1.2717e + 06	5.1292	1.3736e + 06	0.031235	7613	16227	31452	17565
n-n=1000-h=3-d=8-m=10.9	Feasible	(U)	3600.1	1.206e + 06	0.44593	1.3543e + 06	0.020321	7703	9702	17406	62078
n-n=1000-h=3-d=8-m=10.9	Feasible	(I)	3601.6	1.2039e + 06	7.5319	1.2753e + 06	0.018952	7703	16405	31812	32478
n-n=1000-h=3-d=8-m=10.9	Feasible	(L)	3600.4	1.2056e + 06	1.7367	1.2753e + 06	0.017735	7703	16405	24109	26395
n-n=1000-h=3-d=8-m=10.9	Feasible	(P)	3600.3	1.2054e + 06	1.1248	1.3309e + 06	0.037538	7703	9702	17406	50979
n-n=1000-h=3-d=8-m=10.9	Feasible	(STM)	3600.1	1.2042e + 06	8.6727	1.313e + 06	0.040274	7703	16405	31812	11466
n-n=1000-h=3-d=8-m=10.10	Feasible	`(U) ´	3600.1	1.3605e+06	0.43793	1.5118e + 06	0.014695	7770	9770	17540	52488
n-n=1000-h=3-d=8-m=10.10	Feasible	(I)	3601.1	1.36e + 06	6.505	1.4301e+06	0.0126	7770	16540	32080	17991
n-n=1000-h=3-d=8-m=10.10	Feasible	(L)	3600.6	1.3603e+06	2.6986	1.4301e+06	0.012103	7770	16540	24310	25621
n-n=1000-h=3-d=8-m=10.10	Feasible	(P)	3600.1	1.3604e+06	0.84487	1.4842e+06	0.028002	7770	9770	17540	51606
n-n=1000-h=3-d=8-m=10.10	Feasible	(STM)	3600.1	1.36e+06	5.5272	1.4728e+06	0.029725	7770	16540	32080	15906
n-n=1000-h=3-d=8-m=10.11	Feasible	(U)	3600.1	1.1259e+06	0.59791	1.2676e+06	0.025723	7631	9631	17262	37311
n-n=1000-h=3-d=8-m=10.11 n-n=1000-h=3-d=8-m=10.11	Feasible	(I)	3600.1	1.1259e+06 1.1256e+06	2.5136	1.1958e+06	0.021309	7631	16262	31524	25092
n-n=1000-h=3-d=8-m=10.11 n-n=1000-h=3-d=8-m=10.11	Feasible		3600.3	1.1256e+06	3.4705	1.1958e+06	0.018416	7631	16262	23893	21475
		(L)									
n-n=1000-h=3-d=8-m=10.11	Feasible	(P)	3600.1	1.1256e+06	1.5668	1.2476e+06	0.036125	7631	9631	17262	49097
n-n=1000-h=3-d=8-m=10.11	Feasible	(STM)	3600.1	1.1239e+06	5.4892	1.2336e + 06	0.043437	7631	16262	31524	13162

					ices - Part 3						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=1000-h=3-d=8-m=10.12	Feasible	(U)	3600.1	1.25e+06	0.45793	1.3918e+06	0.014379	7480	9479	16960	54870
n-n=1000-h=3-d=8-m=10.12	Feasible	(I)	3600.6	1.2498e+06	3.7034	1.3106e+06	0.012862	7480	15959	30920	20962
n-n=1000-h=3-d=8-m=10.12 n-n=1000-h=3-d=8-m=10.12	Feasible Feasible	(L) (P)	3600.8 3600.1	1.2498e+06 1.25e+06	3.3535 $0.97285$	1.3106e+06	0.012134 $0.026579$	7480 7480	15959 94 <b>7</b> 9	23440 16960	32160 71069
n-n=1000-n=3-d=8-m=10.12 n-n=1000-h=3-d=8-m=10.12	Feasible	(STM)	3600.1	1.25e+06 1.2492e+06	7.4699	1.3677e+06 1.3503e+06	0.026579	7480	15959	30920	13167
n-n=1000-h=3-d=8-m=10.12	Feasible	(U)	3600.3	1.1462e+06	0.61891	1.303e+06 1.302e+06	0.030293	7731	9731	17462	34460
n-n=1000-h=3-d=8-m=10.13	Feasible	(I)	3600.1	1.1461e+06	3.6574	1.2191e+06	0.016805	7731	16462	31924	20865
n-n=1000-h=3-d=8-m=10.13	Feasible	(L)	3600.6	1.1461e+06	3.6385	1.2191e+06	0.017251	7731	16462	24193	25901
n-n=1000-h=3-d=8-m=10.13	Feasible	(P)	3600.2	1.1458e+06	0.96585	1.2793e+06	0.0364	7731	9731	17462	67724
n-n=1000-h=3-d=8-m=10.13	Feasible	(STM)	3600.2	1.1453e + 06	5.2982	1.2616e+06	0.041952	7731	16462	31924	14971
n-n=1000-h=3-d=8-m=10.14	Feasible	(U)	3600.1	1.3044e + 06	0.72489	1.4556e + 06	0.017079	7753	9753	17506	40941
n-n=1000-h=3-d=8-m=10.14	Feasible	(I)	3600.1	1.3046e + 06	6.2801	1.3716e + 06	0.014551	7753	16506	32012	16032
n-n=1000-h=3-d=8-m=10.14	Feasible	(L)	3600.5	1.3044e + 06	3.6554	1.3716e + 06	0.014598	7753	16506	24259	27676
n-n=1000-h=3-d=8-m=10.14	Feasible	(P)	3600.2	1.3043e + 06	1.4598	1.4315e + 06	0.03101	7753	9753	17506	52395
n-n=1000-h=3-d=8-m=10.14	Feasible	(STM)	3600.4	1.3042e + 06	3.0395	1.4164e + 06	0.034556	7753	16506	32012	21870
n-n=1000-h=3-d=8-m=10.15	Feasible	(U)	3600.2	1.2054e + 06	0.55392	1.3489e + 06	0.015398	7856	9856	17712	36794
n-n=1000-h=3-d=8-m=10.15	Feasible	(I)	3600.1	1.2051e + 06	6.2481	1.2724e + 06	0.013954	7856	16712	32424	14043
n-n=1000-h=3-d=8-m=10.15	Feasible	(L)	3600.2	1.2054e + 06	2.8756	1.2724e + 06	0.013268	7856	16712	24568	33116
n-n=1000-h=3-d=8-m=10.15	Feasible	(P)	3600.2	1.2054e + 06	1.2308	1.3242e + 06	0.029466	7856	9856	17712	107794
n-n=1000-h=3-d=8-m=10.15	Feasible	(STM)	3600.4	1.2031e+06	5.9741	1.3141e + 06	0.035195	7856	16712	32424	18522
n-n=1000-h=3-d=8-m=10.16	Feasible	(U)	3600.3	1.1647e+06	0.55592	1.302e+06	0.017309	7601	9602	17202	45328
n-n=1000-h=3-d=8-m=10.16	Feasible	(I)	3600.1	1.1645e+06	5.8341	1.231e+06	0.014949	7601	16203	31404	18728
n-n=1000-h=3-d=8-m=10.16	Feasible	(L)	3600.3	1.164e+06	2.1997	1.231e+06	0.014519	7601	16203	23803	38187
n-n=1000-h=3-d=8-m=10.16	Feasible	(P)	3600.3	1.1645e+06	1.2298	1.2806e+06	0.031639	7601	9602	17202	51185
n-n=1000-h=3-d=8-m=10.16 n-n=1000-h=3-d=8-m=10.17	Feasible Feasible	(STM) (U)	3600.5 3600.2	1.164e+06 1.2825e+06	5.2822 $0.46093$	1.2674e+06 1.4351e+06	0.035389 $0.020634$	7601 7664	16203 9665	$31404 \\ 17328$	19588 37799
n-n=1000-n=3-d=8-m=10.17 n-n=1000-h=3-d=8-m=10.17	Feasible Feasible	(I)	3600.2		5.4822			7664	16329	31656	23316
n-n=1000-n=3-d=8-m=10.17 n-n=1000-h=3-d=8-m=10.17	Feasible Feasible	(L)	3600.6	1.282e+06 1.2825e+06	1.7297	1.3537e+06 1.3537e+06	0.018461 $0.017565$	7664	16329	23992	51533
n-n=1000-n=3-d=8-m=10.17 n-n=1000-h=3-d=8-m=10.17	Feasible	(E) (P)	3600.2	1.2825e+06 1.2826e+06	1.7297	1.4109e+06	0.017565	7664	9665	17328	69699
n-n=1000-h=3-d=8-m=10.17	Feasible	(STM)	3600.8	1.2819e+06	10.309	1.3929e+06	0.037033	7664	16329	31656	11616
n-n=1000-h=3-d=8-m=10.17	Feasible	(U)	3600.2	1.2261e+06	0.40294	1.376e+06	0.020061	7579	9579	17158	48670
n-n=1000-h=3-d=8-m=10.18	Feasible	(I)	3600.6	1.2258e+06	4.3403	1.2994e+06	0.016977	7579	16158	31316	22430
n-n=1000-h=3-d=8-m=10.18	Feasible	(L)	3600.4	1.2267e+06	1.6018	1.2994e+06	0.01584	7579	16158	23737	35411
n-n=1000-h=3-d=8-m=10.18	Feasible	(P)	3600.2	1.2267e+06	1.2188	1.3543e+06	0.034099	7579	9579	17158	76298
n-n=1000-h=3-d=8-m=10.18	Feasible	(STM)	3600.2	1.2203e+06	8.6177	1.339e+06	0.043491	7579	16158	31316	10945
n-n=1000-h=3-d=8-m=10.19	Feasible	(U)	3600.4	1.2231e+06	0.51292	1.3707e+06	0.017963	7605	9606	17210	38997
n-n=1000-h=3-d=8-m=10.19	Feasible	(I)	3600.1	1.2226e+06	5.8651	1.2896e+06	0.016138	7605	16211	31420	15614
n-n=1000-h=3-d=8-m=10.19	Feasible	(L)	3600.1	1.2225e+06	2.6156	1.2896e + 06	0.015698	7605	16211	23815	34325
n-n=1000-h=3-d=8-m=10.19	Feasible	(P)	3600.2	1.2228e+06	1.3198	1.347e + 06	0.032408	7605	9606	17210	53097
n-n=1000-h=3-d=8-m=10.19	Feasible	(STM)	3600.2	1.2223e+06	6.577	1.3282e+06	0.03394	7605	16211	31420	11766
n-n=1500-h=3-d=8-m=10.0	Feasible	(U)	3600.3	2.2567e + 06	1.0628	2.5168e + 06	0.019313	11531	14532	26062	27435
n-n=1500-h=3-d=8-m=10.0	Feasible	(I)	3601.9	2.2535e + 06	12.906	2.38e + 06	0.018633	11531	24563	47624	10808
n-n=1500-h=3-d=8-m=10.0	Feasible	(L)	3600.9	2.2562e + 06	6.0461	2.38e + 06	0.017482	11531	24563	36093	14197
n-n=1500-h=3-d=8-m=10.0	Feasible	(P)	3600.3	2.2559e + 06	2.4236	2.4728e + 06	0.035447	11531	14532	26062	29585
n-n=1500-h=3-d=8-m=10.0	Feasible	(STM)	3600.4	2.2544e + 06	19.582	2.4497e + 06	0.038442	11531	24563	47624	8207
n-n=1500-h=3-d=8-m=10.1	Feasible	(U)	3600.2	2.2343e+06	0.6369	2.5037e + 06	0.019	11635	14635	26270	39586
n-n=1500-h=3-d=8-m=10.1	Feasible	(I)	3600.8	2.232e+06	9.6585	2.3569e + 06	0.017408	11635	24770	48040	10071
n-n=1500-h=3-d=8-m=10.1	Feasible	(L)	3600.3	2.2312e+06	7.2999	2.3569e+06	0.017701	11635	24770	36405	13334
n-n=1500-h=3-d=8-m=10.1	Feasible	(P)	3600.2	2.2332e+06	2.9276	2.4558e + 06	0.035309	11635	14635	26270	31566
n-n=1500-h=3-d=8-m=10.1	Feasible	(STM)	3600.3	2.2324e+06	12.478	2.4302e+06	0.038061	11635	24770	48040	11326
n-n=1500-h=3-d=8-m=10.2	Feasible	(U)	3600.1	2.5007e+06	0.52392	2.7634e+06	0.015637	11610	14610	26220	29834
n-n=1500-h=3-d=8-m=10.2	Feasible	(I)	3601.7	2.5002e+06	9.1176	2.6191e+06	0.013057	11610	24720	47940	12796
n-n=1500-h=3-d=8-m=10.2 n-n=1500-h=3-d=8-m=10.2	Feasible Feasible	(L) (P)	3600.7 3600.3	2.5002e+06	4.5223 2.6876	2.6191e+06	0.013073	11610 11610	24720	36330 26220	20886 29106
n-n=1500-n=3-d=8-m=10.2 n-n=1500-h=3-d=8-m=10.2	Feasible	(STM)	3600.3	2.5005e+06 2.494e+06	15.151	2.7201e+06 2.6922e+06	0.030066 $0.032436$	11610	14610 $24720$	47940	8392
n-n=1500-h=3-d=8-m=10.2	Feasible	(U)	3600.2	2.3063e+06	0.90486	2.5778e+06	0.032436	11651	14652	26302	26295
n-n=1500-h=3-d=8-m=10.3	Feasible	(I)	3600.2	2.3003e+06 2.3017e+06	5.8141	2.4312e+06	0.01823	11651	24803	48104	13728
n-n=1500-h=3-d=8-m=10.3	Feasible	(L)	3600.2	2.3053e+06	5.4432	2.4312e+06 2.4312e+06	0.0164	11651	24803	36453	32365
n-n=1500-h=3-d=8-m=10.3	Feasible	(P)	3600.5	2.3055e+06	1.6598	2.5355e+06	0.03496	11651	14652	26302	31195
n-n=1500-h=3-d=8-m=10.3	Feasible	(STM)	3600.8	2.3041e+06	13.832	2.4989e+06	0.03711	11651	24803	48104	12263
n-n=1500-h=3-d=8-m=10.4	Feasible	(U)	3600.2	2.2662e+06	1.1058	2.5225e+06	0.017842	11603	14604	26206	24786
n-n=1500-h=3-d=8-m=10.4	Feasible	(I)	3600.1	2.2655e+06	11.157	2.3866e+06	0.015371	11603	24707	47912	21197
n-n=1500-h=3-d=8-m=10.4	Feasible	(L)	3601.1	2.2662e+06	6.328	2.3866e+06	0.014616	11603	24707	36309	21692
n-n=1500-h=3-d=8-m=10.4	Feasible	(P)	3600.2	2.2645e + 06	2.2697	2.4831e + 06	0.033904	11603	14604	26206	39226
n-n=1500-h=3-d=8-m=10.4	Feasible	(STM)	3601.1	2.2608e + 06	15.446	2.4499e + 06	0.038635	11603	24707	47912	6595
n-n=1500-h=3-d=8-m=10.5	Feasible	(U)	3600.1	2.4135e + 06	0.82588	2.6769e + 06	0.018448	11610	14610	26220	22344
n-n=1500-h=3-d=8-m=10.5	Feasible	(I)	3601.2	2.4121e + 06	10.782	2.5334e+06	0.015936	11610	24720	47940	12396
n-n=1500-h=3-d=8-m=10.5	Feasible	(L)	3600.8	2.4109e+06	6.478	2.5334e+06	0.016282	11610	24720	36330	10686
n-n=1500-h=3-d=8-m=10.5	Feasible	(P)	3600.3	2.4141e + 06	2.3087	2.6356e + 06	0.030548	11610	14610	26220	40206
n-n=1500-h=3-d=8-m=10.5	Feasible	(STM)	3600.1	2.4114e + 06	13.126	2.6039e+06	0.033667	11610	24720	47940	10455
n-n=1500-h=3-d=8-m=10.6	Feasible	(U)	3600.1	2.2278e + 06	1.1308	2.4847e + 06	0.019662	11569	14568	26138	23366
n-n=1500-h=3-d=8-m=10.6	Feasible	(I)	3601	2.2259e + 06	10.84	2.3512e + 06	0.017581	11569	24637	47776	9519
n-n=1500-h=3-d=8-m=10.6	Feasible	(L)	3600.7	2.2262e+06	5.8121	2.3512e + 06	0.017315	11569	24637	36207	18510
n-n=1500-h=3-d=8-m=10.6	Feasible	(P)	3600.2	2.225e+06	3.5775	2.4438e+06	0.036066	11569	14568	26138	26441
n-n=1500-h=3-d=8-m=10.6	Feasible	(STM)	3600.3	2.2254e+06	13.333	2.4147e+06	0.037927	11569	24637	47776	7419
n-n=1500-h=3-d=8-m=10.7	Feasible	(U)	3600.2	2.4528e+06	0.60891	2.716e+06	0.017629	11542	14537	26084	32572
n-n=1500-h=3-d=8-m=10.7	Feasible	(I)	3601.1	2.4531e+06	10.592	2.5745e+06	0.014108	11542	24579	47668	23628
n-n=1500-h=3-d=8-m=10.7	Feasible	(L)	3601.3	2.4525e+06	4.1524	2.5745e+06	0.014629	11542	24579	36126	11906
n-n=1500-h=3-d=8-m=10.7	Feasible	(P)	3600.3	2.4500e+06	3.0355	2.6716e+06	0.031928	11542	14537	26084	42772
n-n=1500-h=3-d=8-m=10.7	Feasible	(STM)	3600.4	2.4459e + 06	11.784	2.6487e + 06	0.038028	11542	24579	47668	6628

				All Instanc	es - Part 4						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=1500-h=3-d=8-m=10.8	Feasible	(U)	3600.1	2.3096e+06	0.97785	2.5744e + 06	0.01925	11601	14598	26202	23542
n-n=1500-h=3-d=8-m=10.8	Feasible	(I)	3600.8	2.3071e+06	9.8465	2.4331e+06	0.017828	11601	24699	47904	8479
n-n=1500-h=3-d=8-m=10.8 n-n=1500-h=3-d=8-m=10.8	Feasible Feasible	(L) (P)	3600.2 3600.1	2.309e+06 2.3082e+06	7.7388 $3.4575$	2.4331e+06 2.5348e+06	0.016849 $0.035956$	11601 11601	24699 $14598$	36303 $26202$	20020 27625
n-n=1500-n=3-d=8-m=10.8 n-n=1500-h=3-d=8-m=10.8	Feasible Feasible	(STM)	3600.1	2.3082e+06 2.305e+06	3.4575 15.319	2.5348e+06 2.5001e+06	0.035956	11601	14598 24699	47904	11717
n-n=1500-h=3-d=8-m=10.9	Feasible	(U)	3600.2	2.3301e+06	0.82987	2.5923e+06	0.016499	11469	14470	25938	30574
n-n=1500-h=3-d=8-m=10.9	Feasible	(I)	3600.9	2.3302e+06	10.143	2.4503e+06	0.014055	11469	24439	47376	16986
n-n=1500-h=3-d=8-m=10.9	Feasible	(L)	3600.2	2.3302e+06	5.9141	2.4503e+06	0.013705	11469	24439	35907	18699
n-n=1500-h=3-d=8-m=10.9	Feasible	(P)	3600.1	2.3296e+06	3.3525	2.5491e + 06	0.031903	11469	14470	25938	27100
n-n=1500-h=3-d=8-m=10.9	Feasible	(STM)	3600.8	2.3295e + 06	13.183	2.5222e+06	0.035249	11469	24439	47376	10496
n-n=1500-h=3-d=8-m=10.10	Feasible	(U)	3600.3	2.2695e + 06	0.80388	2.5381e + 06	0.021213	11407	14408	25814	33718
n-n=1500-h=3-d=8-m=10.10	Feasible	(I)	3600.1	2.2674e + 06	9.5576	2.3968e + 06	0.018305	11407	24315	47128	14000
n-n=1500-h=3-d=8-m=10.10	Feasible	(L)	3600.5	2.268e+06	5.0422	2.3968e+06	0.017859	11407	24315	35721	15257
n-n=1500-h=3-d=8-m=10.10	Feasible	(P)	3600.2	2.2683e+06	3.3695	2.4991e+06	0.037096	11407	14408	25814	24917
n-n=1500-h=3-d=8-m=10.10 n-n=1500-h=3-d=8-m=10.11	Feasible Feasible	(STM) (U)	3601 3600.3	2.2648e+06 2.2719e+06	7.6268 1.0738	2.4654e+06 2.5348e+06	$0.040461 \\ 0.019467$	$\frac{11407}{11679}$	24315 14680	47128 $26358$	14065 39739
n-n=1500-h=3-d=8-m=10.11	Feasible	(I)	3602.1	2.264e+06	15.709	2.3929e+06	0.020543	11679	24859	48216	8221
n-n=1500-h=3-d=8-m=10.11	Feasible	(L)	3600.4	2.2708e+06	6.809	2.3929e+06	0.017335	11679	24859	36537	13262
n-n=1500-h=3-d=8-m=10.11	Feasible	(P)	3600.1	2.2693e+06	2.6176	2.4947e+06	0.035671	11679	14680	26358	48138
n-n=1500-h=3-d=8-m=10.11	Feasible	(STM)	3600.2	2.2666e+06	19.363	2.4614e + 06	0.03791	11679	24859	48216	10981
n-n=1500-h=3-d=8-m=10.12	Feasible	(U)	3600.4	2.3188e + 06	0.93186	2.5878e + 06	0.019016	11680	14680	26360	25501
n-n=1500-h=3-d=8-m=10.12	Feasible	(I)	3601.2	2.3181e + 06	9.0576	2.4385e + 06	0.016173	11680	24860	48220	10371
n-n=1500-h=3-d=8-m=10.12	Feasible	(L)	3600.7	2.3179e + 06	4.4953	2.4385e + 06	0.015752	11680	24860	36540	14971
n-n=1500-h=3-d=8-m=10.12	Feasible	(P)	3600.4	2.3177e + 06	1.6777	2.5442e + 06	0.033462	11680	14680	26360	44901
n-n=1500-h=3-d=8-m=10.12	Feasible	(STM)	3600.6	2.3114e+06	7.3519	2.5146e+06	0.038576	11680	24860	48220	11270
n-n=1500-h=3-d=8-m=10.13	Feasible	(U)	3600.4	2.2944e+06	0.6539	2.5722e+06	0.020239	11679	14679	26358	38838
n-n=1500-h=3-d=8-m=10.13 n-n=1500-h=3-d=8-m=10.13	Feasible Feasible	(I)	3600.1 3600.7	2.2939e+06 2.2922e+06	11.97 6.0111	2.4260e+06 2.4260e+06	0.017861 $0.018409$	11679 11679	24858 24858	48216 36537	19726 18921
n-n=1500-h=3-d=8-m=10.13 n-n=1500-h=3-d=8-m=10.13	Feasible Feasible	(E) (P)	3600.7	2.2922e+06 2.2908e+06	2.2277	2.4260e+06 2.5291e+06	0.018409	11679	24858 14679	26358	18921 44057
n-n=1500-h=3-d=8-m=10.13	Feasible	(STM)	3600.1	2.2885e+06	12.574	2.498e+06	0.042965	11679	24858	48216	11478
n-n=1500-h=3-d=8-m=10.14	Feasible	(U)	3600.9	2.2850e+06	0.76288	2.5449e + 06	0.019345	11640	14639	26280	37660
n-n=1500-h=3-d=8-m=10.14	Feasible	(I)	3601.8	2.2787e + 06	12.476	2.4089e + 06	0.019204	11640	24779	48060	8800
n-n=1500-h=3-d=8-m=10.14	Feasible	(L)	3600.6	2.2847e + 06	6.1421	2.4089e + 06	0.016147	11640	24779	36420	13100
n-n=1500-h=3-d=8-m=10.14	Feasible	(P)	3600.5	2.2841e + 06	2.2377	2.5037e + 06	0.034399	11640	14639	26280	66560
n-n=1500-h=3-d=8-m=10.14	Feasible	(STM)	3600.3	2.2846e + 06	12.027	2.4782e + 06	0.035828	11640	24779	48060	10516
n-n=1500-h=3-d=8-m=10.15	Feasible	(U)	3600.2	2.5243e + 06	1.0189	2.7931e + 06	0.016206	11332	14333	25664	32147
n-n=1500-h=3-d=8-m=10.15	Feasible	(I)	3600.5	2.5235e+06	5.1532	2.6553e+06	0.013072	11332	24165	46828	25799
n-n=1500-h=3-d=8-m=10.15	Feasible	(L)	3601.2	2.5241e+06	6.529	2.6553e+06	0.013177	11332	24165	35496	14287
n-n=1500-h=3-d=8-m=10.15 n-n=1500-h=3-d=8-m=10.15	Feasible Feasible	(P) (STM)	3600.3 3600.1	2.5244e+06 2.5226e+06	1.9767 $11.65$	2.752e+06 2.7263e+06	0.029278 $0.033516$	11332 $11332$	14333 $24165$	25664 $46828$	40908 11115
n-n=1500-h=3-d=8-m=10.15 n-n=1500-h=3-d=8-m=10.16	Feasible	(U)	3600.1	2.2442e+06	0.95785	2.7203e+06 2.5281e+06	0.033516	11424	14423	25848	22672
n-n=1500-h=3-d=8-m=10.16	Feasible	(I)	3600.1	2.2381e+06	11.907	2.3812e+06	0.023904	11424	24347	47196	10724
n-n=1500-h=3-d=8-m=10.16	Feasible	(L)	3600.1	2.2471e+06	7.4949	2.3812e+06	0.020125	11424	24347	35772	10575
n-n=1500-h=3-d=8-m=10.16	Feasible	(P)	3600.3	2.2475e+06	1.1768	2.4834e + 06	0.038801	11424	14423	25848	48372
n-n=1500-h=3-d=8-m=10.16	Feasible	(STM)	3600.2	2.2465e+06	11.819	2.4568e + 06	0.041978	11424	24347	47196	11573
n-n=1500-h=3-d=8-m=10.17	Feasible	(U)	3600.4	2.3032e+06	1.1348	2.5733e + 06	0.018904	11455	14455	25910	27928
n-n=1500-h=3-d=8-m=10.17	Feasible	(I)	3600.2	2.3029e+06	9.3456	2.429e + 06	0.015341	11455	24410	47320	15109
n-n=1500-h=3-d=8-m=10.17	Feasible	(L)	3600.9	2.3028e + 06	7.1499	2.429e + 06	0.015275	11455	24410	35865	13421
n-n=1500-h=3-d=8-m=10.17	Feasible	(P)	3601.2	2.303e+06	2.1867	2.528e+06	0.033972	11455	14455	25910	40526
n-n=1500-h=3-d=8-m=10.17 n-n=1500-h=3-d=8-m=10.18	Feasible	(STM)	3600.5 3600.7	2.3014e+06 2.2217e+06	16.323	2.4953e+06	0.037037	11455 $11584$	24410 $14585$	47320	10496
n-n=1500-h=3-d=8-m=10.18 n-n=1500-h=3-d=8-m=10.18	Feasible Feasible	(U) (I)	3600.7	2.2217e+06 2.2207e+06	1.0268 8.8027	2.4818e+06 2.3464e+06	0.019305 $0.016555$	11584	24669	26168 $47836$	24169 13516
n-n=1500-h=3-d=8-m=10.18 n-n=1500-h=3-d=8-m=10.18	Feasible	(L)	3600.1	2.2207e+06 2.2218e+06	4.3663	2.3464e+06 2.3464e+06	0.015541	11584	24669	36252	19659
n-n=1500-h=3-d=8-m=10.18	Feasible	(P)	3600.1	2.2218e+06 2.2206e+06	1.1248	2.4438e+06	0.035212	11584	14585	26168	40829
n-n=1500-h=3-d=8-m=10.18	Feasible	(STM)	3600.2	2.2163e+06	17.057	2.4158e+06	0.039598	11584	24669	47836	7796
n-n=1500-h=3-d=8-m=10.19	Feasible	(U)	3600.5	2.23e+06	0.96285	2.4932e+06	0.019977	11734	14733	26468	29527
n-n=1500-h=3-d=8-m=10.19	Feasible	(I)	3600.8	2.2289e + 06	12.893	2.3555e+06	0.017055	11734	24967	48436	7539
n-n=1500-h=3-d=8-m=10.19	Feasible	(L)	3601.6	2.2283e+06	6.295	2.3555e + 06	0.017383	11734	24967	36702	17425
n-n=1500-h=3-d=8-m=10.19	Feasible	(P)	3600.1	2.23e+06	2.7076	2.454e + 06	0.036219	11734	14733	26468	24927
n-n=1500-h=3-d=8-m=10.19	Feasible	(STM)	3600.9	2.2273e+06	17.293	2.4264e+06	0.039381	11734	24967	48436	11039
n-n=2000-h=3-d=8-m=10.0	Feasible	(U)	3600.1	3.3851e+06	1.1388	3.7879e+06	0.019098	15437	19437	34874	17656
n-n=2000-h=3-d=8-m=10.0 n-n=2000-h=3-d=8-m=10.0	Feasible Feasible	(I) (L)	3602.6 3600.6	3.3863e+06 3.3841e+06	20.766 7.7698	3.5727e+06 3.5727e+06	0.016407 $0.016129$	15437 $15437$	32874 32874	63748 48311	6018 28021
n-n=2000-n=3-d=8-m=10.0 n-n=2000-h=3-d=8-m=10.0	Feasible Feasible	(L) (P)	3600.6	3.3841e+06 3.3843e+06	4.7083	3.7278e+06 3.7278e+06	0.016129	15437	19437	34874	22406
n-n=2000-h=3-d=8-m=10.0	Feasible	(STM)	3601.1	3.379e+06	22.587	3.6860e+06	0.034874	15437	32874	63748	8218
n-n=2000-h=3-d=8-m=10.1	Feasible	(U)	3600.3	3.454e+06	1.2608	3.8892e+06	0.022647	15576	19570	35152	25228
n-n=2000-h=3-d=8-m=10.1	Feasible	(I)	3601.9	3.4419e+06	18.886	3.6552e+06	0.022178	15576	33146	64304	5411
n-n=2000-h=3-d=8-m=10.1	Feasible	(L)	3600.1	3.4548e + 06	10.562	3.6552e + 06	0.018299	15576	33146	48728	8375
n-n=2000-h=3-d=8-m=10.1	Feasible	(P)	3600.8	3.4561e + 06	3.3765	3.8227e + 06	0.037468	15576	19570	35152	30527
n-n=2000-h=3-d=8-m=10.1	Feasible	(STM)	3600.9	3.4405e + 06	21.668	3.7703e + 06	0.044319	15576	33146	64304	8011
n-n=2000-h=3-d=8-m=10.2	Feasible	(U)	3600.4	3.358e+06	1.9877	3.7552e+06	0.021109	15651	19652	35302	17190
n-n=2000-h=3-d=8-m=10.2	Feasible	(I)	3600.4	3.3552e+06	24.536	3.5389e+06	0.018176	15651	33303	64604	8883
n-n=2000-h=3-d=8-m=10.2	Feasible	(L) (P)	3601.1	3.3573e+06	11.62	3.5389e+06	0.017464	15651	33303	48953	10512
n-n=2000-h=3-d=8-m=10.2 n-n=2000-h=3-d=8-m=10.2	Feasible Feasible	(STM)	3600.3 3600.2	3.3562e+06 3.3544e+06	4.3383 14.095	3.6881e+06 3.6426e+06	0.036423 $0.038649$	15651 $15651$	19652 33303	35302 $64604$	29230 14962
n-n=2000-n=3-d=8-m=10.2 n-n=2000-h=3-d=8-m=10.3	Feasible Feasible	(STM) (U)	3600.2	3.6235e+06	1.4998	4.0554e+06	0.038649	15610	19610	35220	5403
n-n=2000-h=3-d=8-m=10.3	Feasible	(I)	3601.8	3.6152e+06	21.102	3.8329e+06	0.022131	15610	33220	64440	4151
n-n=2000-h=3-d=8-m=10.3	Feasible	(L)	3603.3	3.6182e+06	10.005	3.8329e+06	0.021331	15610	33220	48830	8381
n-n=2000-h=3-d=8-m=10.3	Feasible	(P)	3600.8	3.3154e+06	4.1314	3.9875e+06	0.13581	15610	19610	35220	18801
n-n=2000-h=3-d=8-m=10.3	Feasible	(STM)	3601.5	3.6079e+06	23.047	3.9418e+06	0.045075	15610	33220	64440	4651
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				All Instanc	ces - Part 5						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=2000-h=3-d=8-m=10.4	Feasible	(U)	3600.1	3.6497e + 06	1.6338	4.0698e + 06	0.019219	15398	19392	34796	17692
n-n=2000-h=3-d=8-m=10.4	Feasible	(I)	3603	3.6452e + 06	23.854	3.8497e + 06	0.017873	15398	32790	63592	5393
n-n=2000-h=3-d=8-m=10.4	Feasible	(L)	3601.3	3.645e + 06	11.757	3.8497e + 06	0.017581	15398	32790	48194	10395
n-n=2000-h=3-d=8-m=10.4	Feasible	(P)	3600.2	3.6484e + 06	3.7644	4.0021e+06	0.035803	15398	19392	34796	30799
n-n=2000-h=3-d=8-m=10.4	Feasible	(STM)	3600.2	3.6358e + 06	32.565	3.9525e+06	0.038582	15398	32790	63592	5101
n-n=2000-h=3-d=8-m=10.5	Feasible	(U)	3600.1	3.4977e + 06	1.4668	3.9194e + 06	0.02146	15594	19595	35188	17494
n-n=2000-h=3-d=8-m=10.5	Feasible	(I)	3601.7	3.491e + 06	15.142	3.6996e + 06	0.019844	15594	33189	64376	8991
n-n=2000-h=3-d=8-m=10.5	Feasible	(L)	3600.5	3.4983e+06	10.532	3.6996e+06	0.017323	15594	33189	48782	12797
n-n=2000-h=3-d=8-m=10.5	Feasible	(P)	3600.2	3.493e + 06	2.5456	3.8542e + 06	0.03935	15594	19595	35188	21064
n-n=2000-h=3-d=8-m=10.5	Feasible	(STM)	3601.3	3.481e+06	20.722	3.8093e+06	0.043092	15594	33189	64376	7791
n-n=2000-h=3-d=8-m=10.6	Feasible	(U)	3600.2	3.4614e+06	0.69789	3.8748e+06	0.020566	15289	19289	34578	15407
n-n=2000-h=3-d=8-m=10.6	Feasible	(I)	3600.8	3.46e+06	8.6057	3.6567e+06	0.017378	15289	32578	63156	5405
n-n=2000-h=3-d=8-m=10.6	Feasible	(L)	3600.3	3.4608e+06	9.1016	3.6567e+06	0.016772	15289	32578	47867	8606
n-n=2000-h=3-d=8-m=10.6	Feasible	(P)	3600.5	3.4561e+06	4.7263	3.8105e+06	0.038353	15289	19289	34578	16838
n-n=2000-h=3-d=8-m=10.6 n-n=2000-h=3-d=8-m=10.7	Feasible	(STM)	3601.2	3.4445e+06	34.413	3.766e+06	0.042766	15289	32578	63156	6579
n-n=2000-h=3-d=8-m=10.7 n-n=2000-h=3-d=8-m=10.7	Feasible Feasible	(U) (I)	3600.5 3601.1	3.3839e+06 3.3853e+06	1.8797 17.867	3.7842e+06 3.5719e+06	0.020125 $0.017045$	15468 15468	19468 32936	$34936 \\ 63872$	15721 4889
n-n=2000-h=3-d=8-m=10.7 n-n=2000-h=3-d=8-m=10.7	Feasible	(L)	3601.1	3.3821e+06	12.597	3.5719e+06 3.5719e+06	0.017631	15468	32936	48404	8501
n-n=2000-h=3-d=8-m=10.7	Feasible	(E) (P)	3600.3	3.384e+06	5.1272	3.7209e+06	0.036362	15468	19468	34936	18319
n-n=2000-h=3-d=8-m=10.7 n-n=2000-h=3-d=8-m=10.7	Feasible	(STM)	3601.5	3.3446e+06	29.335	3.6828e+06	0.050362	15468	32936	63872	4429
n-n=2000-h=3-d=8-m=10.7 n-n=2000-h=3-d=8-m=10.8	Feasible		3600.1	3.5797e+06			0.031401	15769	19770	35538	12517
n-n=2000-h=3-d=8-m=10.8 n-n=2000-h=3-d=8-m=10.8	Feasible	(U) (I)	3600.1	3.5772e+06	1.5158 $21.585$	3.9686e+06 3.7570e+06	0.017678	15769	33539	65076	4605
n-n=2000-n=3-d=8-m=10.8 n-n=2000-h=3-d=8-m=10.8	Feasible Feasible	(L)	3600.2	3.5772e+06 3.5769e+06	8.2267	3.7570e+06 3.7570e+06	0.015821	15769	33539	49307	11141
n-n=2000-h=3-d=8-m=10.8	Feasible	(P)	3600.2	3.5766e+06	4.8643	3.907e+06	0.013209	15769	19770	35538	24793
n-n=2000-h=3-d=8-m=10.8 n-n=2000-h=3-d=8-m=10.8	Feasible	(STM)	3601.4	3.5583e+06	27.97	3.8616e+06	0.033474	15769	33539	65076	4231
n-n=2000-h=3-d=8-m=10.9	Feasible	(U)	3600.1	3.6044e+06	1.5428	3.9992e+06	0.039933	15476	19472	34952	21937
n-n=2000-h=3-d=8-m=10.9	Feasible	(I)	3602.2	3.6032e+06	13.853	3.7815e+06	0.015651	15476	32948	63904	5278
n-n=2000-h=3-d=8-m=10.9	Feasible	(L)	3602.7	3.6018e+06	13.614	3.7815e+06	0.015572	15476	32948	48428	23982
n-n=2000-h=3-d=8-m=10.9	Feasible	(P)	3600.3	3.5997e+06	2.8796	3.9362e+06	0.033431	15476	19472	34952	27984
n-n=2000-h=3-d=8-m=10.9	Feasible	(STM)	3601	3.5901e+06	23.639	3.8913e+06	0.038495	15476	32948	63904	7278
n-n=2000-h=3-d=8-m=10.10	Feasible	(U)	3600.3	3.5821e+06	1.1688	3.9798e+06	0.018965	15507	19508	35014	15203
n-n=2000-h=3-d=8-m=10.10	Feasible	(I)	3601.5	3.5784e + 06	13.81	3.7696e + 06	0.016856	15507	33015	64028	9194
n-n=2000-h=3-d=8-m=10.10	Feasible	(L)	3601.3	3.5786e + 06	13.767	3.7696e + 06	0.016294	15507	33015	48521	8367
n-n=2000-h=3-d=8-m=10.10	Feasible	(P)	3600.2	3.324e + 06	2.6556	3.9165e + 06	0.11353	15507	19508	35014	22914
n-n=2000-h=3-d=8-m=10.10	Feasible	(STM)	3601.6	3.5571e+06	28.205	3.8724e + 06	0.042956	15507	33015	64028	4594
n-n=2000-h=3-d=8-m=10.11	Feasible	(U)	3600.5	3.4485e + 06	1.9227	3.8652e + 06	0.022244	15439	19438	34878	14611
n-n=2000-h=3-d=8-m=10.11	Feasible	(I)	3600.4	3.4423e + 06	15.483	3.6491e + 06	0.020141	15439	32877	63756	6628
n-n=2000-h=3-d=8-m=10.11	Feasible	(L)	3601.2	3.4446e + 06	10.047	3.6491e + 06	0.019204	15439	32877	48317	6730
n-n=2000-h=3-d=8-m=10.11	Feasible	(P)	3600.3	3.0538e + 06	4.5323	3.7991e + 06	0.1713	15439	19438	34878	14542
n-n=2000-h=3-d=8-m=10.11	Feasible	(STM)	3600.3	3.4341e + 06	23.894	3.7642e + 06	0.045519	15439	32877	63756	6569
n-n=2000-h=3-d=8-m=10.12	Feasible	(U)	3600.1	3.387e + 06	1.3748	3.7932e + 06	0.021618	15465	19463	34930	21231
n-n=2000-h=3-d=8-m=10.12	Feasible	(I)	3600.4	3.3841e + 06	21.841	3.5786e + 06	0.0194	15465	32928	63860	3941
n-n=2000-h=3-d=8-m=10.12	Feasible	(L)	3600.2	3.3868e + 06	12.287	3.5786e + 06	0.018058	15465	32928	48395	7058
n-n=2000-h=3-d=8-m=10.12	Feasible	(P)	3600.6	3.3848e + 06	3.1775	3.734e + 06	0.037472	15465	19463	34930	25609
n-n=2000-h=3-d=8-m=10.12	Feasible	(STM)	3601.5	3.3764e + 06	29.66	3.6842e + 06	0.043683	15465	32928	63860	5309
n-n=2000-h=3-d=8-m=10.13	Feasible	(U)	3600.3	3.4283e+06	1.7237	3.8275e + 06	0.019809	15295	19293	34590	14974
n-n=2000-h=3-d=8-m=10.13	Feasible	(I)	3600.6	3.4278e + 06	15.135	3.613e + 06	0.017209	15295	32588	63180	5296
n-n=2000-h=3-d=8-m=10.13	Feasible	(L)	3601.2	3.4222e+06	10.675	3.613e + 06	0.018598	15295	32588	47885	9084
n-n=2000-h=3-d=8-m=10.13	Feasible	(P)	3601.3	3.4255e + 06	2.6056	3.7642e + 06	0.035583	15295	19293	34590	6526
n-n=2000-h=3-d=8-m=10.13	Feasible	(STM)	3600.6	3.4177e + 06	24.456	3.7188e + 06	0.039924	15295	32588	63180	6098
n-n=2000-h=3-d=8-m=10.14	Feasible	(U)	3600.3	3.6439e + 06	1.3148	4.0579e + 06	0.020007	15515	19513	35030	22423
n-n=2000-h=3-d=8-m=10.14	Feasible	(I)	3600.7	2.6379e + 06	20.281	3.838e + 06	0.40428	15515	33028	64060	9299
n-n=2000-h=3-d=8-m=10.14	Feasible	(L)	3601.7	3.6449e+06	11.17	3.838e+06	0.016177	15515	33028	48545	8004
n-n=2000-h=3-d=8-m=10.14	Feasible	(P)	3600.1	3.6404e+06	2.6656	3.9923e+06	0.03603	15515	19513	35030	15427
n-n=2000-h=3-d=8-m=10.14 n-n=2000-h=3-d=8-m=10.15	Feasible	(STM)	3601.5	0	27.42	3.946e+06	inf	15515 15382	33028	64060	3699
n-n=2000-h=3-d=8-m=10.15 n-n=2000-h=3-d=8-m=10.15	Feasible	(U) (I)	3600.4 3601.5	3.7648e+06 3.7638e+06	1.6447 19.016	4.206e+06 3.9716e+06	0.022071 $0.019026$	15382 15382	19379 32761	34764	12573 8295
n-n=2000-n=3-d=8-m=10.15 n-n=2000-h=3-d=8-m=10.15	Feasible Feasible	(L)	3600.9	3.7638e+06 3.7635e+06	14.028	3.9716e+06 3.9716e+06	0.019026	15382	32761	63528 $48146$	8295 7912
n-n=2000-n=3-d=8-m=10.15 n-n=2000-h=3-d=8-m=10.15	Feasible Feasible	(L) (P)	3600.9	3.7635e+06 3.7641e+06	5.1552	4.1306e+06	0.018735	15382	19379	34764	17990
n-n=2000-h=3-d=8-m=10.15 n-n=2000-h=3-d=8-m=10.15	Feasible	(STM)	3601.5	3.7519e+06	26.172	4.0758e+06	0.038426	15382	32761	63528	7995
n-n=2000-h=3-d=8-m=10.15 n-n=2000-h=3-d=8-m=10.16	Feasible	(U)	3600.2	3.9041e+06	1.7837	4.3161e+06	0.042246	15452	19452	34904	14778
n-n=2000-h=3-d=8-m=10.16 n-n=2000-h=3-d=8-m=10.16	Feasible	(I)	3601.2	3.9041e+06 3.9042e+06	14.884	4.0949e+06	0.017003	15452	32904	63808	7273
n-n=2000-h=3-d=8-m=10.16	Feasible	(L)	3601.2	3.9018e+06	11.56	4.0949e+06	0.014921	15452	32904	48356	7503
n-n=2000-h=3-d=8-m=10.16	Feasible	(P)	3600.3	3.8999e+06	3.0565	4.2442e+06	0.032185	15452	19452	34904	20912
n-n=2000-h=3-d=8-m=10.16	Feasible	(STM)	3600.9	3.8957e+06	19.099	4.2094e+06	0.035284	15452	32904	63808	8673
n-n=2000-h=3-d=8-m=10.17	Feasible	(U)	3600.3	3.4562e+06	1.2798	3.8748e+06	0.021172	15540	19541	35080	24267
n-n=2000-h=3-d=8-m=10.17	Feasible	(I)	3600.1	3.4483e+06	21.141	3.6496e+06	0.020013	15540	33081	64160	12161
n-n=2000-h=3-d=8-m=10.17	Feasible	(L)	3602	3.4533e + 06	7.5199	3.6496e+06	0.018511	15540	33081	48620	10597
n-n=2000-h=3-d=8-m=10.17	Feasible	(P)	3600.2	3.4521e+06	4.6383	3.8102e+06	0.038423	15540	19541	35080	16866
n-n=2000-h=3-d=8-m=10.17	Feasible	(STM)	3600.3	3.4422e+06	20.355	3.7657e+06	0.043256	15540	33081	64160	8176
n-n=2000-h=3-d=8-m=10.18	Feasible	(U)	3600.3	3.3827e + 06	1.2178	3.8041e + 06	0.023553	15608	19609	35216	18497
n-n=2000-h=3-d=8-m=10.18	Feasible	(I)	3600.2	3.3832e+06	21.834	3.5881e+06	0.020344	15608	33217	64432	6925
n-n=2000-h=3-d=8-m=10.18	Feasible	(L)	3600.9	3.359e + 06	10.082	3.5881e + 06	0.027362	15608	33217	48824	9927
n-n=2000-h=3-d=8-m=10.18	Feasible	(P)	3600.1	3.3812e + 06	4.6453	3.7383e + 06	0.040594	15608	19609	35216	14580
n-n=2000-h=3-d=8-m=10.18	Feasible	(STM)	3601.5	3.3511e+06	32.58	3.702e + 06	0.052158	15608	33217	64432	5335
n-n=2000-h=3-d=8-m=10.19	Feasible	(U)	3600.4	3.5917e + 06	1.3818	3.9868e + 06	0.017062	15613	19610	35226	22107
n-n=2000-h=3-d=8-m=10.19	Feasible	(I)	3600.2	3.5875e + 06	20.131	3.7722e + 06	0.015542	15613	33223	64452	4605
n-n=2000-h=3-d=8-m=10.19	Feasible	(L)	3601.4	3.59e + 06	8.6907	3.7722e + 06	0.014294	15613	33223	48839	10793
n-n=2000-h=3-d=8-m=10.19	Feasible	(P)	3600.2	3.586e + 06	3.3805	3.9238e + 06	0.033247	15613	19610	35226	23318
n-n=2000-h=3-d=8-m=10.19	Feasible	(STM)	3600.4	3.5813e + 06	21.476	3.8863e + 06	0.037125	15613	33223	64452	6976

filename	status	formulation	time	All Instanc	es - Part 6 relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=2500-h=3-d=8-m=10.0	Feasible	(U)	3600.1	4.9545e+06	2.3876	5.5594e+06	0.023561	19513	24511	44026	11070
n-n=2500-h=3-d=8-m=10.0	Feasible	(I)	3602.2	4.9546e + 06	33.886	5.2427e + 06	0.019653	19513	41524	80552	1537
n-n=2500-h=3-d=8-m=10.0	Feasible	(L)	3601.3	4.9684e + 06	12.352	5.2427e + 06	0.016836	19513	41524	61039	7144
n-n=2500-h=3-d=8-m=10.0	Feasible	(P)	3601	4.942e + 06	8.0818	5.4594e + 06	0.042618	19513	24511	44026	10754
n-n=2500-h=3-d=8-m=10.0	Feasible	(STM)	3600.6	4.9447e + 06	17.978	5.3939e+06	0.043665	19513	41524	80552	7037
n-n=2500-h=3-d=8-m=10.1	Feasible	(U)	3600.2	5.1573e + 06	3.0715	5.7259e+06	0.019682	19301	24301	43602	10641
n-n=2500-h=3-d=8-m=10.1	Feasible	(I)	3601.6	5.1412e + 06	23.847	5.4253e + 06	0.019732	19301	41102	79704	4492
n-n=2500-h=3-d=8-m=10.1	Feasible	(L)	3602.2	5.1563e + 06	13.53	5.4253e + 06	0.01649	19301	41102	60403	8171
n-n=2500-h=3-d=8-m=10.1	Feasible	(P)	3600.8	5.1233e + 06	7.4699	5.6376e + 06	0.041096	19301	24301	43602	10460
n-n=2500-h=3-d=8-m=10.1	Feasible	(STM)	3600.4	672670	29.188	5.5763e + 06	6.9455	19301	41102	79704	1349
n-n=2500-h=3-d=8-m=10.2	Feasible	(U)	3600.5	4.6772e + 06	1.8747	5.2841e + 06	0.025378	19691	24690	44382	10963
n-n=2500-h=3-d=8-m=10.2	Feasible	(I)	3602.2	4.6728e + 06	18.618	4.9653e + 06	0.023136	19691	41881	81264	3601
n-n=2500-h=3-d=8-m=10.2	Feasible	(L)	3601.1	4.6784e+06	12.143	4.9653e+06	0.021669	19691	41881	61573	4092
n-n=2500-h=3-d=8-m=10.2	Feasible	(P)	3600.8	4.6787e+06	5.5322	5.1925e+06	0.041449	19691	24690	44382	20223
n-n=2500-h=3-d=8-m=10.2	Feasible	(STM)	3600.6	1.0747e+06	35.604	5.1328e+06	3.5571	19691	41881	81264	2300
n-n=2500-h=3-d=8-m=10.3	Feasible	(U)	3601.1	4.4505e+06	2.5076	5.638e+06	0.16146	19708	24708	44416	10061
n-n=2500-h=3-d=8-m=10.3	Feasible	(I)	3601.9	5.0630e+06	23.827	5.3387e+06	0.017929	19708	41916	81332	1571
n-n=2500-h=3-d=8-m=10.3	Feasible	(L)	3600.3	5.0756e+06	17.234	5.3387e+06	0.017525	19708	41916	61624	4582
n-n=2500-h=3-d=8-m=10.3	Feasible	(P)	3602.8	2.7564e+06	7.9068	5.5521e+06	0.90402	19708	24708	44416	10061
n-n=2500-h=3-d=8-m=10.3					22.182			19708	41916		
	Feasible	(STM)	3600.6	4.9804e+06		5.4849e+06	0.054563			81332	3468
n-n=2500-h=3-d=8-m=10.4	Feasible	(U)	3600.2	5.3777e+06	2.1377	5.9316e+06	0.017603	19790	24788	44580	11409
n-n=2500-h=3-d=8-m=10.4	Feasible	(I)	3600.3	5.3762e+06	27.111	5.6362e+06	0.015001	19790	42078	81660	4178
n-n=2500-h=3-d=8-m=10.4	Feasible	(L)	3601	5.3671e+06	11.067	5.6362e+06	0.016146	19790	42078	61870	10084
n-n=2500-h=3-d=8-m=10.4	Feasible	(P)	3600.1	5.373e+06	6.366	5.8471e+06	0.033021	19790	24788	44580	12574
n-n=2500-h=3-d=8-m=10.4	Feasible	(STM)	3601.2	0	26.521	5.7846e+06	inf	19790	42078	81660	3574
n-n=2500-h=3-d=8-m=10.5	Feasible	(U)	3600.3	4.7996e+06	1.8077	5.4064e+06	0.022216	19580	24580	44160	17374
n-n=2500-h=3-d=8-m=10.5	Feasible	(I)	3601.8	4.7994e + 06	24.675	5.0835e + 06	0.019401	19580	41660	80820	6496
n-n=2500-h=3-d=8-m=10.5	Feasible	(L)	3601.9	4.8004e + 06	19.141	5.0835e+06	0.018934	19580	41660	61240	8276
n-n=2500-h=3-d=8-m=10.5	Feasible	(P)	3600.5	4.799e + 06	8.2757	5.3117e + 06	0.039488	19580	24580	44160	12600
n-n=2500-h=3-d=8-m=10.5	Feasible	(STM)	3602.7	4.1261e + 06	35.846	5.2405e+06	0.21226	19580	41660	80820	2296
n-n=2500-h=3-d=8-m=10.6	Feasible	(U)	3600.6	5.1811e + 06	1.4418	5.792e + 06	0.022981	19441	24439	43882	9893
n-n=2500-h=3-d=8-m=10.6	Feasible	(I)	3601.3	5.1742e + 06	18.248	5.4741e + 06	0.020599	19441	41380	80264	4094
n-n=2500-h=3-d=8-m=10.6	Feasible	(L)	3601.6	5.185e + 06	16.244	5.4741e + 06	0.01828	19441	41380	60823	6396
n-n=2500-h=3-d=8-m=10.6	Feasible	(P)	3600.2	5.1799e + 06	6.0531	5.7042e + 06	0.039239	19441	24439	43882	18473
n-n=2500-h=3-d=8-m=10.6	Feasible	(STM)	3601.2	0	31.323	5.6351e + 06	inf	19441	41380	80264	3505
n-n=2500-h=3-d=8-m=10.7	Feasible	(U)	3600.5	5.0659e + 06	1.4238	5.6511e + 06	0.021254	19381	24381	43762	10369
n-n=2500-h=3-d=8-m=10.7	Feasible	(I)	3601	5.0721e + 06	25.828	5.339e + 06	0.016136	19381	41262	80024	5888
n-n=2500-h=3-d=8-m=10.7	Feasible	(L)	3601.4	5.0697e + 06	17.369	5.339e + 06	0.016859	19381	41262	60643	5266
n-n=2500-h=3-d=8-m=10.7	Feasible	(P)	3600.7	5.067e + 06	6.1881	5.5593e + 06	0.036666	19381	24381	43762	12669
n-n=2500-h=3-d=8-m=10.7	Feasible	(STM)	3601.2	0	36.327	5.4912e + 06	inf	19381	41262	80024	2687
n-n=2500-h=3-d=8-m=10.8	Feasible	(U)	3600.2	5.0809e + 06	2.3117	5.6651e + 06	0.022675	19537	24537	44074	10640
n-n=2500-h=3-d=8-m=10.8	Feasible	(I)	3600.5	5.0862e + 06	26.831	5.3645e + 06	0.018451	19537	41574	80648	4538
n-n=2500-h=3-d=8-m=10.8	Feasible	(L)	3600.2	5.0882e + 06	13.796	5.3645e + 06	0.017068	19537	41574	61111	14821
n-n=2500-h=3-d=8-m=10.8	Feasible	(P)	3601	5.0685e + 06	8.3567	5.5774e + 06	0.040123	19537	24537	44074	10313
n-n=2500-h=3-d=8-m=10.8	Feasible	(STM)	3601.5	0	35.626	5.5161e + 06	inf	19537	41574	80648	2808
n-n=2500-h=3-d=8-m=10.9	Feasible	(U)	3600.1	5.0099e + 06	2.6396	5.586e + 06	0.02082	19674	24675	44348	11741
n-n=2500-h=3-d=8-m=10.9	Feasible	(I)	3600.9	4.995e + 06	33.94	5.2831e + 06	0.020494	19674	41849	81196	1351
n-n=2500-h=3-d=8-m=10.9	Feasible	(L)	3600.7	5.0145e + 06	14.992	5.2831e+06	0.016563	19674	41849	61522	7903
n-n=2500-h=3-d=8-m=10.9	Feasible	(P)	3600.2	4.0042e + 06	7.4589	5.4983e + 06	0.29653	19674	24675	44348	11482
n-n=2500-h=3-d=8-m=10.9	Feasible	(STM)	3600.8	625005	27.088	5.4306e+06	7.3275	19674	41849	81196	4736
n-n=2500-h=3-d=8-m=10.10	Feasible	(U)	3600.4	5.5132e + 06	2.2577	6.0789e + 06	0.019037	19281	24278	43562	9977
n-n=2500-h=3-d=8-m=10.10	Feasible	(I)	3601.7	5.5067e + 06	24.419	5.7746e + 06	0.017375	19281	41059	79624	4804
n-n=2500-h=3-d=8-m=10.10	Feasible	(L)	3602.2	5.5166e+06	11.817	5.7746e+06	0.015295	19281	41059	60343	15005
n-n=2500-h=3-d=8-m=10.10	Feasible	(P)	3600.2	5.0813e+06	5.5872	5.9931e+06	0.1198	19281	24278	43562	17812
n-n=2500-h=3-d=8-m=10.10	Feasible	(STM)	3600.7	952268	30.711	5.926e+06	4.9896	19281	41059	79624	2286
n-n=2500-h=3-d=8-m=10.11	Feasible	(U)	3600.1	4.9999e+06	1.7487	5.5711e+06	0.022008	19621	24620	44242	15036
n-n=2500-h=3-d=8-m=10.11	Feasible	(I)	3602	4.9771e+06	30.268	5.2785e+06	0.02286	19621	41741	80984	2626
n-n=2500-h=3-d=8-m=10.11	Feasible	(L)	3600.4	4.9847e+06	12.017	5.2785e+06	0.021226	19621	41741	61363	10804
n-n=2500-h=3-d=8-m=10.11	Feasible	(P)	3600.4	4.994e+06	5.2592	5.4862e+06	0.03907	19621	24620	44242	11468
n-n=2500-h=3-d=8-m=10.11	Feasible	(STM)	3600.4	1.4507e+06	19.036	5.4261e+06	2.5807	19621	41741	80984	3146
n-n=2500-h=3-d=8-m=10.11	Feasible	(U)	3600.2	4.8336e+06	1.6068	5.4112e+06	0.022658	19471	24470	43942	12633
n-n=2500-h=3-d=8-m=10.12	Feasible	(I)	3602.5	4.8336e+06 4.8214e+06	29.943	5.4112e+06 5.1169e+06	0.021545	19471	41441	80384	2101
n-n=2500-h=3-d=8-m=10.12 n-n=2500-h=3-d=8-m=10.12	Feasible		3602.5	4.8214e+06 4.8228e+06	17.126	5.1169e+06	0.021343	19471	41441	60913	3812
n-n=2500-h=3-d=8-m=10.12 n-n=2500-h=3-d=8-m=10.12	Feasible Feasible	(L) (P)	3600.2	4.8228e+06 4.8286e+06	5.4572	5.329e+06	0.021422	19471	$\frac{41441}{24470}$	43942	21682
n-n=2500-h=3-d=8-m=10.12 n-n=2500-h=3-d=8-m=10.12	Feasible	(STM)	3600.2	980438	40.571	5.2648e+06	4.1286	19471	41441	80384	21082
n-n=2500-h=3-d=8-m=10.12 n-n=2500-h=3-d=8-m=10.13	Feasible	(STM) (U)	3600.5	4.7877e+06	1.7427	5.2648e + 06 5.3983e + 06	0.025923	19471	24483	43972	29471
n-n=2500-n=3-d=8-m=10.13 n-n=2500-h=3-d=8-m=10.13	Feasible		3600.4	4.7877e+06 4.7839e+06	31.825	5.0859e+06	0.025923	19486	24483 41469	80444	3241
n-n=2500-n=3-d=8-m=10.13 n-n=2500-h=3-d=8-m=10.13	Feasible	(I) (L)	3600.2	4.7839e+06 4.7904e+06	12.939	5.0859e+06 5.0859e+06	0.022856	19486	41469	60958	9694
		(L) (P)									
n-n=2500-h=3-d=8-m=10.13 n-n=2500-h=3-d=8-m=10.13	Feasible Feasible	(P) (STM)	3600.2 3600.4	4.1504e+06 355821	7.7038 $42.17$	5.3092e+06 5.2450e+06	0.20315 13.085	19486 19486	24483 41469	43972 80444	12139 3004
n-n=2500-h=3-d=8-m=10.14	Feasible	(U)	3600.3	4.9058e+06	1.0518	5.4902e+06	0.022083	19479	24473	43958	12654
n-n=2500-h=3-d=8-m=10.14	Feasible	(I)	3602.2	4.912e+06	20.775	5.185e+06	0.017248	19479	41452	80416	4904
n-n=2500-h=3-d=8-m=10.14	Feasible	(L)	3601.2	4.8851e+06	13.796	5.185e+06	0.022615	19479	41452	60937	7105
05001 0 1 0 15 ::	Feasible	(P)	3601.4	4.8932e+06 0	7.7908	5.4038e+06	0.040417	19479	24473	43958	11362
n-n=2500-h=3-d=8-m=10.14					40.348	5.3437e + 06	inf	19479	41452	80416	2504
n-n=2500-h=3-d=8-m=10.14	Feasible	(STM)	3601								
n-n=2500-h=3-d=8-m=10.14 n-n=2500-h=3-d=8-m=10.15	Feasible Feasible	(U)	3600.4	5.8272e + 06	1.6567	6.3973e + 06	0.016735	19639	24632	44278	17806
n-n=2500-h=3-d=8-m=10.14 n-n=2500-h=3-d=8-m=10.15 n-n=2500-h=3-d=8-m=10.15	Feasible Feasible Feasible	(U) (I)	$3600.4 \\ 3603$	5.8272e+06 9295.8	1.6567 $22.272$	6.3973e+06 6.093e+06	634.68	19639 19639	$24632 \\ 41771$	$44278 \\ 81056$	17806 3593
n-n=2500-h=3-d=8-m=10.14 n-n=2500-h=3-d=8-m=10.15 n-n=2500-h=3-d=8-m=10.15 n-n=2500-h=3-d=8-m=10.15	Feasible Feasible Feasible Feasible	(U) (I) (L)	$3600.4 \\ 3603 \\ 3602.2$	5.8272e+06 9295.8 5.8212e+06	1.6567 22.272 10.296	6.3973e+06 6.093e+06 6.093e+06	634.68 $0.014906$	19639 19639 19639	24632 41771 41771	44278 81056 61417	17806 3593 5994
n-n=2500-h=3-d=8-m=10.14 n-n=2500-h=3-d=8-m=10.15 n-n=2500-h=3-d=8-m=10.15	Feasible Feasible Feasible	(U) (I)	$3600.4 \\ 3603$	5.8272e+06 9295.8	1.6567 $22.272$	6.3973e+06 6.093e+06	634.68	19639 19639	$24632 \\ 41771$	$44278 \\ 81056$	17806 3593

				All Instanc	es - Part 7						
filename	status	formulation	time	value	relax_time	relax_value	gap	edges	columns	rows	nodes
n-n=2500-h=3-d=8-m=10.16	Feasible	(U)	3600.1	4.9238e+06	1.6078	5.5057e + 06	0.021935	19197	24198	43394	15219
n-n=2500-h=3-d=8-m=10.16	Feasible	(I)	3601.5	4.9233e+06	22.966	5.2072e + 06	0.018104	19197	40895	79288	5289
n-n=2500-h=3-d=8-m=10.16	Feasible	(L)	3600.8	4.9241e+06	17.029	5.2072e + 06	0.018127	19197	40895	60091	5691
n-n=2500-h=3-d=8-m=10.16	Feasible	(P)	3600.5	4.9146e+06	7.2919	5.4186e+06	0.039558	19197	24198	43394	11538
n-n=2500-h=3-d=8-m=10.16	Feasible	(STM)	3600.2	976052	35.003	5.3638e+06	4.2546	19197	40895	79288	1798
n-n=2500-h=3-d=8-m=10.17	Feasible	(U)	3600.4	4.8427e+06	1.7297	5.417e+06	0.018879	19459	24458	43918	15897
n-n=2500-h=3-d=8-m=10.17 n-n=2500-h=3-d=8-m=10.17	Feasible Feasible	(I) (L)	3600.3 $3602.7$	3.5146e+06 4.8285e+06	22.378 $19.905$	5.098e+06 5.098e+06	0.39896 $0.018028$	19459 $19459$	41417 $41417$	80336 60877	7329 8590
n-n=2500-h=3-d=8-m=10.17	Feasible	(P)	3600.2	4.8347e+06	7.5849	5.3195e+06	0.036116	19459	24458	43918	13397
n-n=2500-h=3-d=8-m=10.17	Feasible	(STM)	3600.5	4.8231e+06	30.259	5.2659e+06	0.040926	19459	41417	80336	8269
n-n=2500-h=3-d=8-m=10.18	Feasible	(U)	3600.7	4.894e+06	1.4178	5.5059e+06	0.030919	19399	24399	43798	11423
n-n=2500-h=3-d=8-m=10.18	Feasible	(I)	3600.2	4.9315e + 06	23.71	5.2162e + 06	0.019904	19399	41298	80096	11188
n-n=2500-h=3-d=8-m=10.18	Feasible	(L)	3601.6	4.9357e + 06	16.053	5.2162e+06	0.019213	19399	41298	60697	4918
n-n=2500-h=3-d=8-m=10.18	Feasible	(P)	3600.2	4.267e + 06	5.4262	5.4222e+06	0.20175	19399	24399	43798	16809
n-n=2500-h=3-d=8-m=10.18	Feasible	(STM)	3601.3	0	32.101	5.3674e + 06	inf	19399	41298	80096	4015
n-n=2500-h=3-d=8-m=10.19	Feasible	(U)	3600.1	5.1681e + 06	0.85687	5.7289e + 06	0.019503	19650	24649	44300	16127
n-n=2500-h=3-d=8-m=10.19	Feasible	(I)	3601.1	5.1573e + 06	24.003	5.4305e + 06	0.018421	19650	41799	81100	5101
n-n=2500-h=3-d=8-m=10.19	Feasible	(L)	3603	5.1531e + 06	17.452	5.4305e + 06	0.019553	19650	41799	61450	6015
n-n=2500-h=3-d=8-m=10.19	Feasible	(P)	3600.7	5.1466e + 06	6.538	5.6462e + 06	0.038643	19650	24649	44300	10061
n-n=2500-h=3-d=8-m=10.19	Feasible	(STM)	3600.7	1.064e + 06	40.677	5.5643e + 06	4.022	19650	41799	81100	2383
n-n=3000-h=3-d=8-m=10.0	Feasible	(U)	3600.4	6.7029e + 06	2.4206	7.4716e + 06	0.022205	23442	29440	52884	8622
n-n=3000-h=3-d=8-m=10.0	Feasible	(I)	3600.3	6.7000e+06	30.865	7.0676e + 06	0.018866	23442	49882	96768	4411
n-n=3000-h=3-d=8-m=10.0	Feasible	(L)	3600.8	6.6974e+06	17.549	7.0676e+06	0.019002	23442	49882	73326	8309
n-n=3000-h=3-d=8-m=10.0	Feasible	(P)	3600.7	6.6951e+06	11.219	7.3552e+06	0.038636	23442	29440	52884	16470
n-n=3000-h=3-d=8-m=10.0	Feasible	(STM)	3601.3	0	47.491	7.2573e+06	inf	23442	49882	96768	711
n-n=3000-h=3-d=8-m=10.1 n-n=3000-h=3-d=8-m=10.1	Feasible Feasible	(U) (I)	3600.4 3600.2	6.1498e+06 17145	2.8896 $44.929$	6.939e+06 6.5447e+06	0.029534 $366.95$	23554 $23554$	29552 50106	53108 $97216$	10470 661
n-n=3000-h=3-d=8-m=10.1 n-n=3000-h=3-d=8-m=10.1	Feasible Feasible		3600.2 3600.3	6.1692e+06	44.929 17.611		0.022316	23554 $23554$	50106	73662	4808
n-n=3000-n=3-d=8-m=10.1 n-n=3000-h=3-d=8-m=10.1	Feasible Feasible	(L) (P)	3600.3	4.4908e+06	8.0248	6.5447e+06 6.8274e+06	0.022316	$\frac{23554}{23554}$	29552	53108	4808 10766
n-n=3000-h=3-d=8-m=10.1	Feasible	(STM)	3601.9	0	44.4	6.7331e+06	inf	23554	50106	97216	488
n-n=3000-h=3-d=8-m=10.1	Feasible	(U)	3600.1	7.545e+06	2.1527	8.3428e+06	0.021055	23427	29420	52854	10900
n-n=3000-h=3-d=8-m=10.2	Feasible	(I)	3602.4	7.5512e+06	27.809	7.9294e+06	0.017315	23427	49847	96708	2596
n-n=3000-h=3-d=8-m=10.2	Feasible	(L)	3600.4	7.5554e+06	13.501	7.9294e+06	0.016858	23427	49847	73281	4689
n-n=3000-h=3-d=8-m=10.2	Feasible	(P)	3600.5	5.8155e+06	9.4006	8.2174e+06	0.34363	23427	29420	52854	11390
n-n=3000-h=3-d=8-m=10.2	Feasible	(STM)	3600.3	1.5603e+06	37.2	8.1377e+06	4.0125	23427	49847	96708	2736
n-n=3000-h=3-d=8-m=10.3	Feasible	(U)	3600.1	6.0648e + 06	1.6907	6.8394e + 06	0.026683	23259	29259	52518	12246
n-n=3000-h=3-d=8-m=10.3	Feasible	(I)	3600.3	6005.2	30.181	6.4495e + 06	1031.8	23259	49518	96036	715
n-n=3000-h=3-d=8-m=10.3	Feasible	(L)	3600.9	6.0852e + 06	16.422	6.4495e + 06	0.018825	23259	49518	72777	7486
n-n=3000-h=3-d=8-m=10.3	Feasible	(P)	3600.2	4.4055e + 06	10.04	6.7272e + 06	0.43776	23259	29259	52518	11129
n-n=3000-h=3-d=8-m=10.3	Feasible	(STM)	3601.4	0	38.365	6.6432e + 06	inf	23259	49518	96036	4005
n-n=3000-h=3-d=8-m=10.4	Feasible	(U)	3600.4	6.635e + 06	3.4585	7.3832e+06	0.022858	23602	29602	53204	7826
n-n=3000-h=3-d=8-m=10.4	Feasible	(I)	3600.3	6.6403e + 06	28.297	6.9946e + 06	0.018184	23602	50204	97408	3710
n-n=3000-h=3-d=8-m=10.4	Feasible	(L)	3600.8	6.6395e + 06	16.804	6.9946e + 06	0.018203	23602	50204	73806	6101
n-n=3000-h=3-d=8-m=10.4	Feasible	(P)	3600.3	4.7352e+06	12.003	7.27e + 06	0.45442	23602	29602	53204	9242
n-n=3000-h=3-d=8-m=10.4	Feasible	(STM)	3600.1 3600.5	0	39.283 3.4215	7.1851e+06	inf	23602	50204 29368	97408 52742	4202
n-n=3000-h=3-d=8-m=10.5	Feasible	(U)		6.5256e+06		7.5186e+06	0.054725	23371			10725
n-n=3000-h=3-d=8-m=10.5	Feasible	(I)	3600.8	11112	43.172	7.1125e+06	616.51	23371	49739	96484	1173
n-n=3000-h=3-d=8-m=10.5 n-n=3000-h=3-d=8-m=10.5	Feasible Feasible	(L) (P)	3601.6 3600.4	6.6686e+06 6.7339e+06	18.208 7.5179	7.1125e+06 7.3972e+06	0.028922 $0.038636$	23371 $23371$	49739 29368	73113 $52742$	3903 $12425$
n-n=3000-h=3-d=8-m=10.5	Feasible	(STM)	3600.4	1.1555e+06	42.314	7.3242e+06	5.0642	23371	49739	96484	2738
n-n=3000-h=3-d=8-m=10.6	Feasible	(U)	3600.1	6.3279e+06	2.2617	7.2546e+06	0.047919	23234	29233	52468	11626
n-n=3000-h=3-d=8-m=10.6	Feasible	(I)	3600.1	12903	20.363	6.8498e+06	510.99	23234	49467	95936	3089
n-n=3000-h=3-d=8-m=10.6	Feasible	(L)	3600.5	6.4407e+06	22.066	6.8498e+06	0.025682	23234	49467	72702	3094
n-n=3000-h=3-d=8-m=10.6	Feasible	(P)	3600.2	4.9521e+06	9.8205	7.137e+06	0.36021	23234	29233	52468	8507
n-n=3000-h=3-d=8-m=10.6	Feasible	(STM)	3602.6	0	51.49	7.0562e+06	inf	23234	49467	95936	591
n-n=3000-h=3-d=8-m=10.7	Feasible	(U)	3600.1	6.2053e+06	2.2567	6.9657e+06	0.024125	23173	29173	52346	16901
n-n=3000-h=3-d=8-m=10.7	Feasible	(I)	3602.6	6.1847e + 06	39.084	6.5796e+06	0.024123	23173	49346	95692	2974
n-n=3000-h=3-d=8-m=10.7	Feasible	(L)	3601.9	6.175e + 06	17.433	6.5796e + 06	0.025745	23173	49346	72519	3601
n-n=3000-h=3-d=8-m=10.7	Feasible	(P)	3600.5	6.1546e + 06	6.576	6.856e + 06	0.051016	23173	29173	52346	10480
n-n=3000-h=3-d=8-m=10.7	Feasible	(STM)	3600.2	1.2934e + 06	38.631	6.7802e + 06	4.0085	23173	49346	95692	3359
n-n=3000-h=3-d=8-m=10.8	Feasible	(U)	3601.2	6.7325e + 06	3.1365	7.4988e + 06	0.022174	23243	29244	52486	8196
n-n=3000-h=3-d=8-m=10.8	Feasible	(I)	3602.5	3913.2	36.263	7.1043e + 06	1751.7	23243	49487	95972	1205
n-n=3000-h=3-d=8-m=10.8	Feasible	(L)	3600.2	6.7489e + 06	17	7.1043e + 06	0.015928	23243	49487	72729	7157
n-n=3000-h=3-d=8-m=10.8	Feasible	(P)	3600.2	4.8808e+06	9.2626	7.3799e+06	0.43219	23243	29244	52486	9774
n-n=3000-h=3-d=8-m=10.8	Feasible	(STM)	3600.6	1.4252e + 06	38.635	7.3025e+06	3.9101	23243	49487	95972	3071
n-n=3000-h=3-d=8-m=10.9	Feasible	(U)	3601.3	6.3439e+06	2.8586	7.0922e+06	0.023493	23676	29675	53352	7513
n-n=3000-h=3-d=8-m=10.9	Feasible	(I)	3603.5	13472	41.708	6.7041e+06	479.01	23676	50351	97704	1001
n-n=3000-h=3-d=8-m=10.9	Feasible	(L)	3601.7	6.3407e+06	18.466	6.7041e+06	0.019709	23676	50351	74028	1207
n-n=3000-h=3-d=8-m=10.9 n-n=3000-h=3-d=8-m=10.9	Feasible Feasible	(P)	3600.5 3600.2	6.3283e+06	10.748 55.931	6.9828e+06	0.041794 $4.7588$	23676 $23676$	29675 50351	53352 $97704$	8386 1924
n-n=3000-n=3-d=8-m=10.9 n-n=3000-h=3-d=8-m=10.10	Feasible	(STM) (U)	3600.2	1.1453e+06 6.7382e+06	3.0305	6.9e+06 7.6742e+06	0.045297	23447	29446	52894	7318
n-n=3000-h=3-d=8-m=10.10 n-n=3000-h=3-d=8-m=10.10	Feasible Feasible	(I)	3694.3	2.721e+06	33.252	7.6742e+06 7.2593e+06	1.5799	23447	49893	96788	1126
n-n=3000-n=3-d=8-m=10.10 n-n=3000-h=3-d=8-m=10.10	Feasible Feasible	(L)	3694.3	2.721e+06 13348	33.252 15.44	7.2593e+06 7.2593e+06	524.84	23447	49893	73341	4819
n-n=3000-h=3-d=8-m=10.10 n-n=3000-h=3-d=8-m=10.10	Feasible	(P)	3600.3	4.5113e+06	8.2867	7.5524e+06	0.58376	23447	29446	52894	10477
n-n=3000-h=3-d=8-m=10.10	Feasible	(STM)	3601.2	0	43.552	7.4656e+06	inf	23447	49893	96788	587
n-n=3000-h=3-d=8-m=10.11	Feasible	(U)	3601.4	6.1377e+06	2.9596	6.9145e+06	0.026889	23271	29272	52542	7985
n-n=3000-h=3-d=8-m=10.11	Feasible	(I)	3600.4	6.138e+06	30.03	6.5257e+06	0.023208	23271	49543	96084	4162
n-n=3000-h=3-d=8-m=10.11	Feasible	(L)	3600.4	6.1275e+06	23.763	6.5257e+06	0.024865	23271	49543	72813	3143
n-n=3000-h=3-d=8-m=10.11	Feasible	(P)	3600.2	3.7418e+06	10.143	6.7972e+06	0.71261	23271	29272	52542	10277
n-n=3000-h=3-d=8-m=10.11	Feasible	(STM)	3601.7	4034.4	40.328	6.7328e + 06	1591.1	23271	49543	96084	698

					Table with M	feans and Star	dard Deviations					
group	formulation	optimal	feasible	time	$_{\mathrm{time\_d}}$	relax_time	$relax\_time\_d$	nodes	nodes_d	gap	gap_d	gap_improvement
n-n=500-h=3-d=8-m=10	(U)	0	20	3600.1	0.0402	0.17462	0.038874	72918	13191	0.014072	0.0036198	0
n-n=500-h=3-d=8-m=10	(I)	0	20	3600.2	0.12204	1.5936	0.34538	51473	16139	0.012427	0.0035087	0
n-n=500-h=3-d=8-m=10	(L)	0	20	3600.2	0.083933	0.96915	0.24544	62270	12430	0.011997	0.0033095	0
n-n=500-h=3-d=8-m=10	(P)	0	20	3600.1	0.052307	0.42024	0.075723	1.3089e + 05	27158	0.02609	0.0056735	0
n-n=500-h=3-d=8-m=10	(STM)	0	20	3600.2	0.064829	2.1465	0.51078	40874	7584.5	0.031024	0.0061427	0
n-n=1000-h=3-d=8-m=10	(U)	0	20	3600.2	0.12684	0.50057	0.088337	46070	8648.6	0.017892	0.002118	0.098691
n-n=1000-h=3-d=8-m=10	(I)	0	20	3600.6	0.40624	5.4018	1.3838	20404	5095.9	0.015551	0.0019515	0.0393
n-n=1000-h=3-d=8-m=10	(L)	0	20	3600.4	0.23864	2.94	0.73682	31273	7757.8	0.015237	0.0018874	0.039535
n-n=1000-h=3-d=8-m=10	(P)	0	20	3600.2	0.10455	1.2542	0.24114	64514	20797	0.032521	0.0030485	0.065203
n-n=1000-h=3-d=8-m=10	(STM)	0	20	3600.3	0.17418	6.3368	1.7238	14733	3477.7	0.036334	0.0038803	0.04989
n-n=1500-h=3-d=8-m=10	(U)	0	20	3600.3	0.21474	0.89676	0.17977	29612	5701.7	0.019056	0.0018519	0.094197
n-n=1500-h=3-d=8-m=10	(I)	0	20	3600.9	0.60364	10.386	2.3235	13671	5153	0.017011	0.002533	0.037187
n-n=1500-h=3-d=8-m=10	(L)	0	20	3600.7	0.41534	6.0035	1.0356	16659	4904.1	0.016253	0.0017733	0.037317
n-n=1500-h=3-d=8-m=10	(P)	0	20	3600.3	0.23508	2.4501	0.69667	37448	10237	0.034423	0.0025298	0.060758
n-n=1500-h=3-d=8-m=10	(STM)	0	20	3600.4	0.31302	13.816	3.1634	10191	1954.8	0.037743	0.0025928	0.04625
n-n=2000-h=3-d=8-m=10	(U)	0	20	3600.3	0.13577	1.4718	0.30416	17345	4558.8	0.020283	0.0018524	0.094514
n-n=2000-h=3-d=8-m=10	(I)	0	20	3601.1	0.84718	18.488	3.9287	6632.1	2136.8	0.037463	0.084178	0.036873
n-n=2000-h=3-d=8-m=10	(L)	0	20	3601.2	0.79794	10.781	1.8793	10834	5309.2	0.017725	0.0026731	0.037241
n-n=2000-h=3-d=8-m=10	(P)	0	20	3600.4	0.28822	3.8487	0.9072	20972	6037	0.051907	0.038281	0.060342
n-n=2000-h=3-d=8-m=10	(STM)	0	20	3601	0.50449	25.168	4.9985	6733.8	2421.3	Inf	NaN	0.046294
n-n=2500-h=3-d=8-m=10	(U)	0	20	3600.4	0.24248	1.864	0.53139	13520	4447.3	0.028866	0.030576	0.092117
n-n=2500-h=3-d=8-m=10	(I)	0	20	3601.4	0.81388	25.469	4.4169	4396.1	2232.6	31.772	138.32	0.036245
n-n=2500-h=3-d=8-m=10	(L)	0	20	3601.4	0.78904	14.815	2.7344	7718.1	3069.3	0.018297	0.0022872	0.036375
n-n=2500-h=3-d=8-m=10	(P)	0	20	3600.6	0.61656	6.8612	1.0314	13402	3460.2	0.12459	0.19498	0.058816
n-n=2500-h=3-d=8-m=10	(STM)	0	20	3600.9	0.56876	31.932	6.791	3442.9	1707.2	Inf	NaN	0.044429
n-n=3000-h=3-d=8-m=10	(U)	0	20	3600.6	0.49302	2.7195	0.54934	9261	2349.3	0.030576	0.011432	0.092772
n-n=3000-h=3-d=8-m=10	(I)	0	20	3605.9	20.321	33.214	6.7674	1963.2	1247.2	442.77	670.93	0.036412
n-n=3000-h=3-d=8-m=10	(L)	0	20	3602.1	4.9852	18.335	3.381	5008.2	2035.6	26.262	114.38	0.036574
n-n=3000-h=3-d=8-m=10	(P)	0	20	3600.4	0.28637	8.7954	1.903	11546	3917.7	0.27545	0.21835	0.058621
n-n=3000-h=3-d=8-m=10	(STM)	0	20	3600.8	0.69137	42.925	8.1347	2031.1	1351.1	$_{\mathrm{Inf}}$	NaN	0.045111

## 3 Popularity Model

					es - Part 1						
filename p-n=500-e=4000-q=200-d=0.25.0	status Feasible	formulation (U)	time 3600	value 10682	relax_time 0.14698	relax_value 12567	gap 0.039669	edges 4000	columns 4951	9000	nodes 12162
p-n=500-e=4000-q=200-d=0.25.0 p-n=500-e=4000-q=200-d=0.25.0	Feasible	(I)	3600.2	10665	2.9056	11896	0.054163	4000	8451	16500	7972
p-n=500-e=4000-q=200-d=0.25.0	Feasible	(L)	3600.2	10673	1.5248	11896	0.039966	4000	8451	12500	8391
p-n=500-e=4000-q=200-d=0.25.0	Feasible	(P)	3600.2	10686	0.39594	12491	0.062195	4000	4951	9000	72852
p-n=500-e=4000-q=200-d=0.25.0	Feasible	(STM)	3600.2	10582	1.0988	12497	0.10481	4000	8451	16500	14176
p-n=500-e=4000-q=200-d=0.25.1	Feasible	(U)	3600	10932	0.12798	12610	0.025634	4000	4943	9000	13328
p-n=500-e=4000-q=200-d=0.25.1	Feasible	(I)	3600.2	10767	2.1997	11879	0.048877	4000	8443	16500	9370
p-n=500-e=4000-q=200-d=0.25.1	Feasible	(L)	3600.1	10934	1.7017	11879	0.025331	4000	8443	12500	8969
p-n=500-e=4000-q=200-d=0.25.1	Feasible	(P)	3600.1	10941	0.28496	12551	0.046877	4000	4943	9000	59199
p-n=500-e=4000-q=200-d=0.25.1	Feasible	(STM)	3600.2	10819	1.9267	12511	0.083932	4000	8443	16500 9000	7921
p-n=500-e=4000-q=200-d=0.25.2 p-n=500-e=4000-q=200-d=0.25.2	Feasible Feasible	(U) (I)	3600.1 3600.3	10561 $10584$	0.16598 $3.0175$	12432 11738	0.043361 $0.041888$	4000 4000	4948 8448	16500	10614 7727
p-n=500-e=4000-q=200-d=0.25.2 p-n=500-e=4000-q=200-d=0.25.2	Feasible	(L)	3600.3	10609	1.3668	11738	0.037617	4000	8448	12500	11404
p-n=500-e=4000-q=200-d=0.25.2	Feasible	(P)	3600.1	10620	0.32895	12364	0.057017	4000	4948	9000	67204
p-n=500-e=4000-q=200-d=0.25.2	Feasible	(STM)	3600.4	10483	2.9486	12328	0.10399	4000	8448	16500	6804
p-n=500-e=4000-q=200-d=0.25.3	Feasible	(U)	3600.1	10598	0.14198	12268	0.025576	4000	4939	9000	17101
p-n=500-e=4000-q=200-d=0.25.3	Feasible	(I)	3600.2	10571	2.0527	11569	0.029298	4000	8439	16500	6964
p-n=500-e=4000-q=200-d=0.25.3	Feasible	(L)	3600	10590	1.4078	11569	0.027491	4000	8439	12500	7040
p-n=500-e=4000-q=200-d=0.25.3	Feasible	(P)	3600.1	10593	0.41394	12193	0.053645	4000	4939	9000	43595
p-n=500-e=4000-q=200-d=0.25.3	Feasible	(STM)	3600.5	10017	2.8056	12243	0.13905	4000	8439	16500	7695
p-n=500-e=4000-q=200-d=0.25.4 p-n=500-e=4000-q=200-d=0.25.4	Feasible Feasible	(U) (I)	3600.1 3600.1	10810 10800	0.13498 $2.3886$	12447 11806	0.017332 $0.032501$	4000 4000	4940 8440	9000 16500	12587 5873
p-n=500-e=4000-q=200-d=0.25.4 p-n=500-e=4000-q=200-d=0.25.4	Feasible	(L)	3600.1	10810	1.2808	11806	0.014643	4000	8440	12500	6048
p-n=500-e=4000-q=200-d=0.25.4	Feasible	(P)	3600.3	10809	0.55892	12391	0.034413	4000	4940	9000	36696
p-n=500-e=4000-q=200-d=0.25.4	Feasible	(STM)	3600.1	10705	2.6386	12414	0.078707	4000	8440	16500	6916
p-n=500-e=4000-q=200-d=0.25.5	Feasible	(U)	3600.1	10539	0.21997	12348	0.034596	4000	4943	9000	9836
p-n=500-e=4000-q=200-d=0.25.5	Feasible	(I)	3600.1	10489	2.9775	11733	0.050724	4000	8443	16500	5283
p-n=500-e=4000-q=200-d=0.25.5	Feasible	(L)	3600.3	10558	1.2398	11733	0.035	4000	8443	12500	8599
p-n=500-e=4000-q=200-d=0.25.5	Feasible	(P)	3600.3	10559	0.49992	12277	0.049737	4000	4943	9000	51499
p-n=500-e=4000-q=200-d=0.25.5	Feasible	(STM)	3600.4	10163	3.2465	12250	0.12746	4000	8443	16500	5299
p-n=500-e=4000-q=200-d=0.25.6	Feasible	(U)	3600.1	10520	0.16797	12237	0.030563	4000	4933	9000	11000
p-n=500-e=4000-q=200-d=0.25.6	Feasible Feasible	(I)	3600.3 3600.4	10500 10516	1.7657 $1.4278$	11603 11603	0.040305 $0.034114$	4000	8433 8433	16500 12500	8089 10241
p-n=500-e=4000-q=200-d=0.25.6 p-n=500-e=4000-q=200-d=0.25.6	Feasible	(L) (P)	3600.4	10510	0.34995	12173	0.053571	4000 4000	4933	9000	48051
p-n=500-e=4000-q=200-d=0.25.6	Feasible	(STM)	3600.3	10431	1.8157	12179	0.090441	4000	8433	16500	8389
p-n=500-e=4000-q=200-d=0.25.7	Feasible	(U)	3600.2	10452	0.13098	12233	0.037682	4000	4950	9000	14451
p-n=500-e=4000-q=200-d=0.25.7	Feasible	(I)	3600.4	10476	2.2946	11606	0.050909	4000	8450	16500	11871
p-n=500-e=4000-q=200-d=0.25.7	Feasible	(L)	3600.1	10478	1.0069	11606	0.034347	4000	8450	12500	17939
p-n=500-e=4000-q=200-d=0.25.7	Feasible	(P)	3600.2	10475	0.42994	12175	0.060366	4000	4950	9000	68051
p-n=500-e=4000-q=200-d=0.25.7	Feasible	(STM)	3600.4	10271	2.2517	12214	0.10855	4000	8450	16500	9206
p-n=500-e=4000-q=200-d=0.25.8	Feasible	(U)	3600.1	10301	0.17097	12134	0.030754	4000	4931	9000	10736
p-n=500-e=4000-q=200-d=0.25.8	Feasible Feasible	(I) (L)	3600.2 3600.2	10286 10309	1.7187 1.3568	11470 $11470$	0.041572 $0.036321$	4000 4000	8431 8431	16500 12500	7168 9571
p-n=500-e=4000-q=200-d=0.25.8 p-n=500-e=4000-q=200-d=0.25.8	Feasible	(E)	3600.2	10309	0.51292	12062	0.058125	4000	4931	9000	51661
p-n=500-e=4000-q=200-d=0.25.8	Feasible	(STM)	3600.2	10187	1.8887	12052	0.10221	4000	8431	16500	8187
p-n=500-e=4000-q=200-d=0.25.9	Feasible	(U)	3600.2	10199	0.093985	12207	0.053457	4000	4941	9000	10467
p-n=500-e=4000-q=200-d=0.25.9	Feasible	(I)	3600.4	10232	3.3455	11500	0.054566	4000	8441	16500	8101
p-n=500-e=4000-q=200-d=0.25.9	Feasible	(L)	3600.3	10215	1.6827	11500	0.053713	4000	8441	12500	9297
p-n=500-e=4000-q=200-d=0.25.9	Feasible	(P)	3600.1	10221	0.22397	12141	0.078307	4000	4941	9000	69697
p-n=500-e=4000-q=200-d=0.25.9	Feasible	(STM)	3600.4	10027	2.9026	12144	0.13041	4000	8441	16500	6397
p-n=500-e=4000-q=200-d=0.25.10	Feasible	(U)	3600.1	10915	0.15298	12646	0.03238	4000	4923	9000	13057
p-n=500-e=4000-q=200-d=0.25.10	Feasible Feasible	(I) (L)	3600.2 3600.3	10807 10933	3.0545 $1.4798$	12026 12026	0.052096 $0.03224$	4000 4000	8423 8423	16500 12500	6927 11379
p-n=500-e=4000-q=200-d=0.25.10 p-n=500-e=4000-q=200-d=0.25.10	Feasible	(P)	3600.3	10933	0.47693	12589	0.054078	4000	4923	9000	49479
p-n=500-e=4000-q=200-d=0.25.10	Feasible	(STM)	3600.5	10633	2.7286	12579	0.11085	4000	8423	16500	4779
p-n=500-e=4000-q=200-d=0.25.11	Feasible	(U)	3600.1	10110	0.17697	11842	0.040206	4000	4944	9000	11622
p-n=500-e=4000-q=200-d=0.25.11	Feasible	(I)	3600.3	10093	2.7636	11204	0.047178	4000	8444	16500	5700
p-n=500-e=4000-q=200-d=0.25.11	Feasible	(L)	3600.1	10114	1.7527	11204	0.03495	4000	8444	12500	9069
p-n=500-e=4000-q=200-d=0.25.11	Feasible	(P)	3600.2	10066	0.45593	11777	0.068285	4000	4944	9000	39200
p-n=500-e=4000-q=200-d=0.25.11	Feasible	(STM)	3600.2	9986.1	1.1208	11780	0.10288	4000	8444	16500	5628
p-n=500-e=4000-q=200-d=0.25.12 p-n=500-e=4000-q=200-d=0.25.12	Feasible Feasible	(U) (I)	3600.1 3600.1	10432 $10457$	0.089987 $2.4776$	12333 11650	0.046982 $0.04946$	4000 4000	4934 8434	9000 16500	10690 8398
p-n=500-e=4000-q=200-d=0.25.12 p-n=500-e=4000-q=200-d=0.25.12	Feasible Feasible	(L) (P)	3600.2 3600.3	10443 10448	1.9867 0.45793	11650 12265	0.041344 $0.07373$	4000 4000	8434 4934	12500 9000	11964 57990
p-n=500-e=4000-q=200-d=0.25.12	Feasible	(STM)	3600.1	10096	2.3296	12287	0.13815	4000	8434	16500	7786
p-n=500-e=4000-q=200-d=0.25.13	Feasible	(U)	3600.1	10948	0.18297	12556	0.022795	4000	4946	9000	14604
p-n=500-e=4000-q=200-d=0.25.13	Feasible	(I)	3600.2	10941	1.8867	11896	0.028169	4000	8446	16500	5202
p-n=500-e=4000-q=200-d=0.25.13	Feasible	(L)	3600.2	10953	1.3688	11896	0.025006	4000	8446	12500	11271
p-n=500-e=4000-q=200-d=0.25.13	Feasible	(P)	3600.1	10944	0.37394	12492	0.042337	4000	4946	9000	51302
p-n=500-e=4000-q=200-d=0.25.13	Feasible	(STM)	3600.4	10744	2.8126	12459	0.088593	4000	8446	16500	5402
p-n=500-e=4000-q=200-d=0.25.14	Feasible	(U)	3600.1	10359	0.094986	12190	0.038209	4000	4946	9000	10035
p-n=500-e=4000-q=200-d=0.25.14	Feasible	(I)	3600.2	10289	2.7996	11480 11480	0.054793	4000 4000	8446	16500 $12500$	7994
p-n=500-e=4000-q=200-d=0.25.14 p-n=500-e=4000-q=200-d=0.25.14	Feasible Feasible	(L) (P)	3600.2 3600.2	10362 10364	1.4508 $0.42994$	11480 12123	0.039362 $0.064055$	4000	8446 4946	9000	6556 71531
p-n=500-e=4000-q=200-d=0.25.14 p-n=500-e=4000-q=200-d=0.25.14	Feasible	(STM)	3600.2	10154	2.1007	12119	0.11186	4000	8446	16500	7602
p-n=500-e=4000-q=200-d=0.25.15	Feasible	(U)	3600.2	10744	0.13198	12380	0.023856	4000	4941	9000	11185
p-n=500-e=4000-q=200-d=0.25.15	Feasible	(I)	3600.5	10752	1.8897	11764	0.031715	4000	8441	16500	7871
p-n=500-e=4000-q=200-d=0.25.15	Feasible	(L)	3600.2	10752	1.2678	11764	0.026103	4000	8441	12500	11311
p-n=500-e=4000-q=200-d=0.25.15	Feasible	(P)	3600	10753	0.37094	12310	0.041168	4000	4941	9000	84777
p-n=500-e=4000-q=200-d=0.25.15	Feasible	(STM)	3600.3	10680	2.1837	12326	0.078633	4000	8441	16500	9797

filename	status	formulation	time	value	es - Part 2 relax_time	relax_value	gap	edges	columns	rows	nodes
p-n=500-e=4000-q=200-d=0.25.16	Feasible	(U)	3600.1	10768	0.11898	12417	0.028169	4000	4942	9000	12684
p-n=500-e=4000-q=200-d=0.25.16	Feasible	(I)	3600.2	10763	3.1185	11768	0.032205	4000	8442	16500	11298
p-n=500-e=4000-q=200-d=0.25.16	Feasible	(L)	3600.2	10768	1.3918	11768	0.028111	4000	8442	12500	12441
p-n=500-e=4000-q=200-d=0.25.16	Feasible	(P)	3600.2	10756	0.41894	12365	0.048303	4000	4942	9000	49398
p-n=500-e=4000-q=200-d=0.25.16	Feasible	(STM)	3600.3	10403	2.1707	12317	0.11758	4000	8442	16500	5898
p-n=500-e=4000-q=200-d=0.25.17	Feasible	(U)	3600.2	10770	0.18697	12490	0.032649	4000	4939	9000	9687
p-n=500-e=4000-q=200-d=0.25.17	Feasible	(I)	3600.2	10770	4.1924	11777	0.03213	4000	8439	16500	4701
p-n=500-e=4000-q=200-d=0.25.17	Feasible	(L)	3600	10785	1.0928	11777	0.020847	4000	8439	12500	14295
p-n=500-e=4000-q=200-d=0.25.17	Feasible	(P)	3600.2	10743	0.33395	12408	0.055146	4000	4939	9000	68295
p-n=500-e=4000-q=200-d=0.25.17	Feasible	(STM)	3600.2	10490	1.8827	12401	0.10882	4000	8439	16500	9595
p-n=500-e=4000-q=200-d=0.25.18	Feasible	(U)	3600.2	11049	0.11998	12652	0.019239	4000	4930	9000	11140
p-n=500-e=4000-q=200-d=0.25.18	Feasible	(I)	3600.2	11039	3.8144	11972	0.024954	4000	8430	16500	6448
p-n=500-e=4000-q=200-d=0.25.18	Feasible	(L)	3600.1	11049	1.1618	11972	0.014373	4000	8430	12500	14697
p-n=500-e=4000-q=200-d=0.25.18	Feasible	(P)	3600.1	11043	0.44593	12581	0.044506	4000	4930	9000	34486
									8430		
p-n=500-e=4000-q=200-d=0.25.18	Feasible	(STM)	3600.3	10810	3.1545	12565	0.087563	4000		16500	4886
p-n=500-e=4000-q=200-d=0.25.19	Feasible	(U)	3600	10016	0.10498	11760	0.037551	4000	4930	9000	12643
p-n=500-e=4000-q=200-d=0.25.19	Feasible	(I)	3600.1	9934.1	3.1545	11116	0.055113	4000	8430	16500	7410
p-n=500-e=4000-q=200-d=0.25.19	Feasible	(L)	3600.4	10027	1.6198	11116	0.039147	4000	8430	12500	10786
p-n=500-e=4000-q=200-d=0.25.19	Feasible	(P)	3600	10008	0.46693	11709	0.061266	4000	4930	9000	53057
p-n=500-e=4000-q=200-d=0.25.19	Feasible	(STM)	3600.1	9882	2.0127	11663	0.10824	4000	8430	16500	8526
p-n=1000-e=8000-q=200-d=0.25.0	Feasible	(U)	3600.4	21387	0.41294	24830	0.036012	8000	9884	18000	4390
p-n=1000-e=8000-q=200-d=0.25.0	Feasible	(I)	3600.2	21342	7.7318	23560	0.057826	8000	16884	33000	2716
p-n=1000-e=8000-q=200-d=0.25.0	Feasible	(L)	3600.8	21390	4.8043	23560	0.058889	8000	16884	25000	2105
p-n=1000-e=8000-q=200-d=0.25.0	Feasible	(P)	3600.3	21412	1.1238	24707	0.068251	8000	9884	18000	19990
p-n=1000-e=8000-q=200-d=0.25.0 p-n=1000-e=8000-q=200-d=0.25.0	Feasible		3600.3	18798	6.0111	24672	0.008231	8000	16884		1605
p-n=1000-e=8000-q=200-d=0.25.0 p-n=1000-e=8000-q=200-d=0.25.1		(STM)		19912				8000	16884 9895	33000	
	Feasible	(U)	3601.7		0.41794	24314	0.096983			18000	5201
p-n=1000-e=8000-q=200-d=0.25.1	Feasible	(I)	3601.1	20483	5.0022	23042	0.079217	8000	16895	33000	1561
p-n=1000-e=8000-q=200-d=0.25.1	Feasible	(L)	3600.1	20908	5.9241	23042	0.060215	8000	16895	25000	3284
p-n=1000-e=8000-q=200-d=0.25.1	Feasible	(P)	3600.3	20862	0.82288	24185	0.076283	8000	9895	18000	12601
p-n=1000-e=8000-q=200-d=0.25.1	Feasible	(STM)	3600.8	18015	12.834	24222	0.26418	8000	16895	33000	761
p-n=1000-e=8000-q=200-d=0.25.2	Feasible	(U)	3600	20423	0.43493	24418	0.07142	8000	9881	18000	3092
p-n=1000-e=8000-q=200-d=0.25.2	Feasible	(I)	3600.5	20354	5.2332	23150	0.089077	8000	16881	33000	802
o-n=1000-e=8000-q=200-d=0.25.2	Feasible	(L)	3600.7	19949	5.8401	23150	0.11599	8000	16881	25000	3002
o-n=1000-e=8000-q=200-d=0.25.2	Feasible	(P)	3600.1	16742	1.2008	24298	0.34367	8000	9881	18000	11186
o-n=1000-e=8000-q=200-d=0.25.2	Feasible	(STM)	3601	19003	8.7807	24300	0.20356	8000	16881	33000	702
o-n=1000-e=8000-q=200-d=0.25.3	Feasible	(U)	3600.2	20212	0.38894	24596	0.084869	8000	9874	18000	6280
				19872							
o-n=1000-e=8000-q=200-d=0.25.3	Feasible	(I)	3600.4		8.4967	23170	0.1147	8000	16874	33000	1695
o-n=1000-e=8000-q=200-d=0.25.3	Feasible	(L)	3600.3	20841	3.9224	23170	0.064101	8000	16874	25000	4995
p-n=1000-e=8000-q=200-d=0.25.3	Feasible	(P)	3600.3	20502	1.1478	24455	0.094124	8000	9874	18000	19680
p-n=1000-e=8000-q=200-d=0.25.3	Feasible	(STM)	3600.1	19447	9.5185	24447	0.1813	8000	16874	33000	794
p-n=1000-e=8000-q=200-d=0.25.4	Feasible	(U)	3600.3	21123	0.46193	24715	0.05081	8000	9858	18000	1766
p-n=1000-e=8000-q=200-d=0.25.4	Feasible	(I)	3601	20490	8.9096	23422	0.096984	8000	16858	33000	1579
p-n=1000-e=8000-q=200-d=0.25.4	Feasible	(L)	3600.6	21138	4.4323	23422	0.067666	8000	16858	25000	2879
p-n=1000-e=8000-q=200-d=0.25.4	Feasible	(P)	3600.3	21166	1.2718	24602	0.081575	8000	9858	18000	10864
p-n=1000-e=8000-q=200-d=0.25.4	Feasible	(STM)	3600.4	20232	6.438	24555	0.14519	8000	16858	33000	1139
p-n=1000-e=8000-q=200-d=0.25.5	Feasible	(U)	3600.2	21479	0.34995	25055	0.046594	8000	9893	18000	5368
p-n=1000-e=8000-q=200-d=0.25.5	Feasible	(I)	3600.2	21258	3.5705	23813	0.075075	8000	16893	33000	2759
p-n=1000-e=8000-q=200-d=0.25.5	Feasible	(L)	3600.5	20883	3.8434	23813	0.093241	8000	16893	25000	2759
	Feasible	(P)	3600.4	21563	1.0618	24931		8000	9893	18000	12799
o-n=1000-e=8000-q=200-d=0.25.5							0.074251				
o-n=1000-e=8000-q=200-d=0.25.5	Feasible	(STM)	3600.5	18558	6.817	24862	0.26453	8000	16893	33000	1059
o-n=1000-e=8000-q=200-d=0.25.6	Feasible	(U)	3601.6	20536	0.41394	24329	0.052278	8000	9884	18000	4890
p-n=1000-e=8000-q=200-d=0.25.6	Feasible	(I)	3601.9	20463	5.8371	23032	0.072966	8000	16884	33000	2005
p-n=1000-e=8000-q=200-d=0.25.6	Feasible	(L)	3600.1	20221	3.7794	23032	0.083911	8000	16884	25000	2442
o-n=1000-e=8000-q=200-d=0.25.6	Feasible	(P)	3600.2	20677	1.0868	24196	0.0767	8000	9884	18000	13690
o-n=1000-e=8000-q=200-d=0.25.6	Feasible	(STM)	3600.1	18666	19.005	24247	0.21627	8000	16884	33000	1304
o-n=1000-e=8000-q=200-d=0.25.7	Feasible	(U)	3600.1	20480	0.57191	24575	0.072255	8000	9877	18000	3785
o-n=1000-e=8000-q=200-d=0.25.7	Feasible	(I)	3600.8	19927	11.382	23242	0.11581	8000	16877	33000	3198
o-n=1000-e=8000-q=200-d=0.25.7	Feasible	(L)	3600.5	20899	5.1772	23242	0.062916	8000	16877	25000	2798
o-n=1000-e=8000-q=200-d=0.25.7	Feasible	(P)	3600.5	20812	1.3338	24463	0.084418	8000	9877	18000	18183
o-n=1000-e=8000-q=200-d=0.25.7		(STM)		20710	7.2749	24419		8000	16877	33000	2198
	Feasible		3600.5				0.11379				
o-n=1000-e=8000-q=200-d=0.25.8	Feasible	(U)	3600.4	21583	0.50592	25322	0.052044	8000	9887	18000	5093
o-n=1000-e=8000-q=200-d=0.25.8	Feasible	(I)	3601	20795	10.371	24025	0.10764	8000	16887	33000	3543
o-n=1000-e=8000-q=200-d=0.25.8	Feasible	(L)	3600.6	19811	4.0154	24025	0.16783	8000	16887	25000	3253
o-n=1000-e=8000-q=200-d=0.25.8	Feasible	(P)	3600.4	21371	1.5348	25193	0.091232	8000	9887	18000	13793
o-n=1000-e=8000-q=200-d=0.25.8	Feasible	(STM)	3600.6	20313	7.0729	25218	0.17273	8000	16887	33000	753
o-n=1000-e=8000-q=200-d=0.25.9	Feasible	(U)	3600.2	21679	0.28696	25164	0.042026	8000	9884	18000	5252
o-n=1000-e=8000-q=200-d=0.25.9	Feasible	(I)	3600.9	21700	8.1348	23875	0.054175	8000	16884	33000	907
o-n=1000-e=8000-q=200-d=0.25.9	Feasible	(L)	3600.6	21608	4.5633	23875	0.057117	8000	16884	25000	2905
o-n=1000-e=8000-q=200-d=0.25.9	Feasible	(P)	3600.3	21723	1.1978	25034	0.066686	8000	9884	18000	11211
o-n=1000-e=8000-q=200-d=0.25.9	Feasible	(STM)	3600.7	18966	9.2166	24940	0.23839	8000	16884	33000	905
o-n=1000-e=8000-q=200-d=0.25.10	Feasible	(U)	3600.7	20835	0.38694	24787	0.056599	8000	9861	18000	1469
o-n=1000-e=8000-q=200-d=0.25.10	Feasible	(I)	3600.2	19559	8.1928	23380	0.14408	8000	16861	33000	2681
o-n=1000-e=8000-q=200-d=0.25.10	Feasible	(L)	3600.1	20144	4.2904	23380	0.11021	8000	16861	25000	2783
o-n=1000-e=8000-q=200-d=0.25.10	Feasible	(P)	3600.2	20970	1.4668	24653	0.08432	8000	9861	18000	9953
o-n=1000-e=8000-q=200-d=0.25.10	Feasible	(STM)	3600.8	18170	10.127	24559	0.27452	8000	16861	33000	882
o-n=1000-e=8000-q=200-d=0.25.11	Feasible	(U)	3600.5	21051	0.50292	24470	0.045	8000	9881	18000	4187
o-n=1000-e=8000-q=200-d=0.25.11	Feasible	(I)	3600.6	20862	6.1181	23190	0.065213	8000	16881	33000	2502
o-n=1000-e=8000-q=200-d=0.25.11	Feasible	(L)	3600.1	21195	4.0574	23190	0.048709	8000	16881	25000	4615
	Feasible	(P)	3600.1	21196	1.1338	24343	0.060951	8000	9881	18000	15667
o-n=1000-e=8000-q=200-d=0.25.11											

filename	status	formulation	time	value	es - Part 3 relax_time	relax_value	gap	edges	columns	rows	nodes
p-n=1000-e=8000-q=200-d=0.25.12	Feasible	(U)	3600.3	20512	0.42094	24429	0.065929	8000	9894	18000	3760
p-n=1000-e=8000-q=200-d=0.25.12	Feasible	(I)	3600.5	18872	5.3762	23157	0.18105	8000	16894	33000	3860
p-n=1000-e=8000-q=200-d=0.25.12	Feasible	(L)	3600.5	20105	3.1435	23157	0.11365	8000	16894	25000	4160
p-n=1000-e=8000-q=200-d=0.25.12	Feasible	(P)	3600.4	21032	0.83787	24322	0.072475	8000	9894	18000	10700
p-n=1000-e=8000-q=200-d=0.25.12	Feasible	(STM)	3600.6	18865	9.8145	24313	0.21433	8000	16894	33000	760
p-n=1000-e=8000-q=200-d=0.25.13	Feasible	(U)	3600.6	20884	0.43693	24302	0.043436	8000	9875	18000	1783
p-n=1000-e=8000-q=200-d=0.25.13	Feasible	(I)	3600.6	19902	5.3942	23030	0.11212	8000	16875	33000	2396
e-n=1000-e=8000-q=200-d=0.25.13	Feasible	(L)	3600.5	20673	4.2553	23030	0.066507	8000	16875	25000	3496
p-n=1000-e=8000-q=200-d=0.25.13	Feasible	(P)	3600.2	20883	0.73789	24178	0.066091	8000	9875	18000	12081
o-n=1000-e=8000-q=200-d=0.25.13	Feasible	(STM)	3600.6	18465	10.171	24085	0.23286	8000	16875	33000	896
o-n=1000-e=8000-q=200-d=0.25.14	Feasible	(U)	3600.4	20615	0.41894	24650	0.067881	8000	9858	18000	3153
o-n=1000-e=8000-q=200-d=0.25.14	Feasible	(I)	3600.7	20584	9.4636	23408	0.087811	8000	16858	33000	798
o-n=1000-e=8000-q=200-d=0.25.14	Feasible	(L)	3601	20741	4.2644	23408	0.0743	8000	16858	25000	2979
-n=1000-e=8000-q=200-d=0.25.14	Feasible	(P)	3600.4	20851	1.3138	24521	0.089948	8000	9858	18000	9964
o-n=1000-e=8000-q=200-d=0.25.14	Feasible	(STM)	3600.7	17868	10.616	24537	0.29289	8000	16858	33000	979
o-n=1000-e=8000-q=200-d=0.25.15	Feasible	(U)	3600.5	21079	0.44793	24723	0.049636	8000	9879	18000	4515
o-n=1000-e=8000-q=200-d=0.25.15	Feasible	(I)	3600.2	21040	4.5293	23459	0.066958	8000	16879	33000	2720
o-n=1000-e=8000-q=200-d=0.25.15	Feasible	(L)	3600.5	20940	5.0792	23459	0.073666	8000	16879	25000	3307
o-n=1000-e=8000-q=200-d=0.25.15	Feasible	(P)	3600.4	21206	1.5008	24617	0.073608	8000	9879	18000	10985
o-n=1000-e=8000-q=200-d=0.25.15	Feasible	(STM)	3600.1	20862	8.0588	24559	0.10758	8000	16879	33000	1630
o-n=1000-e=8000-q=200-d=0.25.15 o-n=1000-e=8000-q=200-d=0.25.16	Feasible	(U)	3600.1	21032	0.34595	24672	0.050966	8000	9898	18000	3362
o-n=1000-e=8000-q=200-d=0.25.16	Feasible	(I)	3600.3	20563	7.1029	23269	0.089053	8000	16898	33000	1490
o-n=1000-e=8000-q=200-d=0.25.16	Feasible	(L)	3600.1	21050	4.8933	23269	0.06613	8000	16898	25000	3183
o-n=1000-e=8000-q=200-d=0.25.16	Feasible	(P)	3600.1	21020	1.5228	24537	0.078422	8000	9898	18000	10518
o-n=1000-e=8000-q=200-d=0.25.16	Feasible	(STM)	3600.4	19885	3.2225	24592	0.16236	8000	16898	33000	1614
o-n=1000-e=8000-q=200-d=0.25.17	Feasible	(U)	3600.1	21001	0.23996	24481	0.0431	8000	9884	18000	5456
o-n=1000-e=8000-q=200-d=0.25.17	Feasible	(I)	3600.3	21010	4.4203	23148	0.056832	8000	16884	33000	3577
o-n=1000-e=8000-q=200-d=0.25.17	Feasible	(L)	3600.6	21122	4.0534	23148	0.050169	8000	16884	25000	2831
o-n=1000-e=8000-q=200-d=0.25.17	Feasible	(P)	3600.1	21154	0.86387	24362	0.065742	8000	9884	18000	14491
o-n=1000-e=8000-q=200-d=0.25.17	Feasible	(STM)	3600.8	17476	8.9946	24241	0.30931	8000	16884	33000	805
p-n=1000-e=8000-q=200-d=0.25.18	Feasible	(U)	3600.3	20911	0.37894	24397	0.051092	8000	9883	18000	5491
o-n=1000-e=8000-q=200-d=0.25.18	Feasible	(I)	3600.2	20278	10.056	23116	0.098304	8000	16883	33000	2511
o-n=1000-e=8000-q=200-d=0.25.18	Feasible	(L)	3600.6	20568	4.7743	23116	0.082536	8000	16883	25000	2504
o-n=1000-e=8000-q=200-d=0.25.18	Feasible	(P)	3600.4	20973	1.5308	24269	0.076037	8000	9883	18000	15089
o-n=1000-e=8000-q=200-d=0.25.18	Feasible	(STM)	3600.2	20133	8.2297	24208	0.13435	8000	16883	33000	1223
o-n=1000-e=8000-q=200-d=0.25.19	Feasible	(U)	3600.2	21300	0.35095	24691	0.038338	8000	9887	18000	6503
o-n=1000-e=8000-q=200-d=0.25.19	Feasible	(I)	3600.1	21180	8.2007	23284	0.055167	8000	16887	33000	2192
p-n=1000-e=8000-q=200-d=0.25.19	Feasible	(L)	3600.1	21317	4.6983	23284	0.046628	8000	16887	25000	3293
o-n=1000-e=8000-q=200-d=0.25.19	Feasible	(P)	3602.3	20367	1.2598	24550	0.11509	8000	9887	18000	11293
p-n=1000-e=8000-q=200-d=0.25.19	Feasible	(STM)	3600.5	20874	6.771	24514	0.10735	8000	16887	33000	1553
p-n=1500-e=12000-q=200-d=0.25.0	Feasible	(U)	3600.5	30685	0.85287	37093	0.079906	12000	14820	27000	911
p-n=1500-e=12000-q=200-d=0.25.0	Feasible	(I)	3600.6	30586	17.31	35079	0.09867	12000	25320	49500	492
o-n=1500-e=12000-q=200-d=0.25.0	Feasible	(L)	3600.3	29540	3.6425	35079	0.13886	12000	25320	37500	1090
p-n=1500-e=12000-q=200-d=0.25.0	Feasible	(P)	3600.8	28081	2.7736	36904	0.21636	12000	14820	27000	5376
p-n=1500-e=12000-q=200-d=0.25.0	Feasible	(STM)	3600.8	23698	41.195	36768	0.45897	12000	25320	49500	490
o-n=1500-e=12000-q=200-d=0.25.1	Feasible	(U)	3600.5	30936	0.98785	36887	0.071178	12000	14829	27000	1785
p-n=1500-e=12000-q=200-d=0.25.1	Feasible	(I)	3600.6	23341	158.28	34921	0.44018	12000	25329	49500	680
p-n=1500-e=12000-q=200-d=0.25.1	Feasible	(L)	3600.3	29280	3.4375	34921	0.1441	12000	25329	37500	1699
o-n=1500-e=12000-q=200-d=0.25.1	Feasible	(P)	3600.6	28804	3.5465	36714	0.17485	12000	14829	27000	6185
o-n=1500-e=12000-q=200-d=0.25.1	Feasible	(STM)	3600.8	24271	17.259	36583	0.42055	12000	25329	49500	499
o-n=1500-e=12000-q=200-d=0.25.2	Feasible	(U)	3601	30931	0.87887	37292	0.076919	12000	14831	27000	4474
o-n=1500-e=12000-q=200-d=0.25.2	Feasible	(I)	3600.2	26776	13.18	35327	0.25943	12000	25331	49500	585
	Feasible		3600.2	30470	8.0778	35327	0.25943	12000	25331	37500	802
o-n=1500-e=12000-q=200-d=0.25.2		(L)									
o-n=1500-e=12000-q=200-d=0.25.2	Feasible	(P)	3600.4	24736	1.9997	37112	0.38934	12000	14831	27000	7587
o-n=1500-e=12000-q=200-d=0.25.2	Feasible	(STM)	3600.6	26558	12.357	37171	0.31406	12000	25331	49500	501
o-n=1500-e=12000-q=200-d=0.25.3	Feasible	(U)	3600.1	31223	0.49992	36742	0.059739	12000	14830	27000	1287
o-n=1500-e=12000-q=200-d=0.25.3	Feasible	(I)	3601.4	29959	17.321	34845	0.11729	12000	25330	49500	1101
o-n=1500-e=12000-q=200-d=0.25.3	Feasible	(L)	3600.2	30920	6.788	34845	0.086994	12000	25330	37500	816
o-n=1500-e=12000-q=200-d=0.25.3	Feasible	(P)	3601.4	30741	2.9766	36588	0.10271	12000	14830	27000	10187
o-n=1500-e=12000-q=200-d=0.25.3	Feasible	(STM)	3600.6	28858	46.671	36495	0.19239	12000	25330	49500	530
o-n=1500-e=12000-q=200-d=0.25.4	Feasible	(U)	3600.1	30368	0.91186	36412	0.075629	12000	14811	27000	529
o-n=1500-e=12000-q=200-d=0.25.4	Feasible	(I)	3601	28622	15.873	34494	0.15806	12000	25311	49500	682
o-n=1500-e=12000-q=200-d=0.25.4	Feasible	(L)	3600.8	29091	11.612	34494	0.14389	12000	25311	37500	2482
o-n=1500-e=12000-q=200-d=0.25.4	Feasible	(P)	3600.7	27267	2.9535	36228	0.23519	12000	14811	27000	7067
o-n=1500-e=12000-q=200-d=0.25.4	Feasible	(STM)	3600.4	28165	27.827	36156	0.20792	12000	25311	49500	571
o-n=1500-e=12000-q=200-d=0.25.5	Feasible	(U)	3600.1	31448	0.86487	37080	0.060843	12000	14833	27000	1590
o-n=1500-e=12000-q=200-d=0.25.5	Feasible	(I)	3600.4	17572	21.267	35087	0.91392	12000	25333	49500	557
o-n=1500-e=12000-q=200-d=0.25.5	Feasible	(L)	3600.4	25720	11.194	35087	0.31154	12000	25333	37500	863
o-n=1500-e=12000-q=200-d=0.25.5	Feasible	(E) (P)	3600.4	31323	1.6907	36912	0.085301	12000	14833	27000	10489
o-n=1500-e=12000-q=200-d=0.25.5	Feasible	(STM)	3600.9	25512	48.995	36763	0.3583	12000	25333	49500	620
o-n=1500-e=12000-q=200-d=0.25.6	Feasible	(U)	3600.1	31244	0.77488	37510	0.073072	12000	14855	27000	1364
o-n=1500-e=12000-q=200-d=0.25.6	Feasible	(I)	3600.1	25644	15.65	35376	0.32632	12000	25355	49500	635
o-n=1500-e=12000-q=200-d=0.25.6	Feasible	(L)	3600.9	28337	8.1518	35376	0.1994	12000	25355	37500	671
o-n=1500-e=12000-q=200-d=0.25.6	Feasible	(P)	3600.3	22312	2.3326	37312	0.54948	12000	14855	27000	8297
p-n=1500-e=12000-q=200-d=0.25.6	Feasible	(STM)	3600.4	29852	28.11	37232	0.17265	12000	25355	49500	530
p-n=1500-e=12000-q=200-d=0.25.7	Feasible	(U)	3600.6	30866	0.86687	36986	0.07604	12000	14826	27000	1184
p-n=1500-e=12000-q=200-d=0.25.7	Feasible	(I)	3600.5	26060	17.623	34933	0.2851	12000	25326	49500	597
p-n=1500-e=12000-q=200-d=0.25.7	Feasible	(L)	3600.5	2670	8.2827	34933	11.558	12000	25326	37500	744
		(P)	3600.3	29862	2.1027	36797	0.14292	12000	14826	27000	10102
o-n=1500-e=12000-q=200-d=0.25.7	Feasible										

filename	status	formulation	time A	ll Instance	es - Part 4	relax_value	gap	edges	columns	rows	nodes
p-n=1500-e=12000-q=200-d=0.25.8	Feasible	(U)	3600.6	30925	0.55992	36572	0.063474	12000	14828	27000	2797
p-n=1500-e=12000-q=200-d=0.25.8	Feasible	(I)	3600.4	19783	21.608	34745	0.6855	12000	25328	49500	550
p-n=1500-e=12000-q=200-d=0.25.8	Feasible	(L)	3600.5	29620	5.9181	34745	0.12611	12000	25328	37500	1099
p-n=1500-e=12000-q=200-d=0.25.8	Feasible	(P)	3600.3	28313	1.4718	36402	0.19745	12000	14828	27000	7484
p-n=1500-e=12000-q=200-d=0.25.8	Feasible	(STM)	3600.5	28779	33.197	36341	0.191	12000	25328	49500	588
p-n=1500-e=12000-q=200-d=0.25.9	Feasible	(U)	3600.7	30018	0.88987	37322	0.11815	12000	14823	27000	979
p-n=1500-e=12000-q=200-d=0.25.9	Feasible	(I)	3600.8	29485	15.622	35297	0.1548	12000	25323	49500	1894
p-n=1500-e=12000-q=200-d=0.25.9	Feasible	(L)	3600.9	30554	9.0366	35297	0.11517	12000	25323	37500	894
p-n=1500-e=12000-q=200-d=0.25.9	Feasible	(P)	3600.4	30141	2.6496	37135	0.13517	12000	14823	27000	10039
p-n=1500-e=12000-q=200-d=0.25.9	Feasible	(STM)	3601.2	27462	60.916	37128	0.27399	12000	25323	49500	495
p-n=1500-e=12000-q=200-d=0.25.10	Feasible Feasible	(U) (I)	3600 3600.3	30925 $27923$	0.6479 $164.25$	36908 34912	0.068022 $0.20295$	12000 $12000$	14808 25308	27000 49500	756 1380
p-n=1500-e=12000-q=200-d=0.25.10 p-n=1500-e=12000-q=200-d=0.25.10	Feasible	(L)	3600.9	28739	9.6785	34912	0.16857	12000	25308	37500	1990
p-n=1500-e=12000-q=200-d=0.25.10 p-n=1500-e=12000-q=200-d=0.25.10	Feasible	(P)	3600.9	29158	2.8706	36722	0.16837	12000	14808	27000	6164
p-n=1500-e=12000-q=200-d=0.25.10 p-n=1500-e=12000-q=200-d=0.25.10	Feasible	(STM)	3600.2	29527	15.319	36672	0.17001	12000	25308	49500	541
p-n=1500-e=12000-q=200-d=0.25.11	Feasible	(U)	3601.4	31042	0.85387	36936	0.07084	12000	14832	27000	499
p-n=1500-e=12000-q=200-d=0.25.11	Feasible	(I)	3600.1	2668	30.07	35031	11.615	12000	25332	49500	550
p-n=1500-e=12000-q=200-d=0.25.11	Feasible	(L)	3600.2	29038	10.108	35031	0.15673	12000	25332	37500	802
p-n=1500-e=12000-q=200-d=0.25.11	Feasible	(P)	3600.6	27614	2.6756	36760	0.23464	12000	14832	27000	8388
p-n=1500-e=12000-q=200-d=0.25.11	Feasible	(STM)	3601	24185	17.701	36624	0.43256	12000	25332	49500	502
p-n=1500-e=12000-q=200-d=0.25.12	Feasible	(U)	3600.4	29625	0.52192	36705	0.10954	12000	14819	27000	775
p-n=1500-e=12000-q=200-d=0.25.12	Feasible	(I)	3600.6	21453	11.505	34819	0.56256	12000	25319	49500	749
p-n=1500-e=12000-q=200-d=0.25.12	Feasible	(L)	3600.2	29425	5.5701	34819	0.13368	12000	25319	37500	1351
p-n=1500-e=12000-q=200-d=0.25.12	Feasible	(P)	3600.2	30516	2.0537	36535	0.10792	12000	14819	27000	9955
p-n=1500-e=12000-q=200-d=0.25.12	Feasible	(STM)	3600.3	29441	14.385	36500	0.17105	12000	25319	49500	536
p-n=1500-e=12000-q=200-d=0.25.13	Feasible	(U)	3600.3	32230	0.95286	37783	0.051855	12000	14815	27000	472
p-n=1500-e=12000-q=200-d=0.25.13	Feasible	(I)	3600.4	29658	26.753	35786	0.16165	12000	25315	49500	902
p-n=1500-e=12000-q=200-d=0.25.13	Feasible	(L)	3600.7	30104	8.7827	35786	0.14332	12000	25315	37500	686
p-n=1500-e=12000-q=200-d=0.25.13	Feasible	(P)	3600.4	30783	1.4118	37592	0.13586	12000	14815	27000	8471
p-n=1500-e=12000-q=200-d=0.25.13	Feasible	(STM)	3601.4	28514	46.458	37527	0.24176	12000	25315	49500	586
p-n=1500-e=12000-q=200-d=0.25.14	Feasible Feasible	(U)	3600.7 $3600.2$	30998 22975	0.98185 $21.391$	37095 35167	0.075015	12000 $12000$	14822 $25322$	27000 49500	1606 564
p-n=1500-e=12000-q=200-d=0.25.14 p-n=1500-e=12000-q=200-d=0.25.14	Feasible	(I) (L)	3600.2	12688	10.614	35167	0.46564 $1.6556$	12000	25322	37500	625
p-n=1500-e=12000-q=200-d=0.25.14 p-n=1500-e=12000-q=200-d=0.25.14	Feasible	(P)	3600.2	29435	2.5906	36907	0.15743	12000	14822	27000	7578
p-n=1500-e=12000-q=200-d=0.25.14 p-n=1500-e=12000-q=200-d=0.25.14	Feasible	(STM)	3600.4	29790	21.038	36911	0.16781	12000	25322	49500	689
p-n=1500-e=12000-q=200-d=0.25.15	Feasible	(U)	3600.4	31501	1.0228	37283	0.066196	12000	14812	27000	1269
p-n=1500-e=12000-q=200-d=0.25.15	Feasible	(I)	3600.1	29550	12.751	35332	0.14765	12000	25312	49500	774
p-n=1500-e=12000-q=200-d=0.25.15	Feasible	(L)	3600.4	30521	6.55	35332	0.11329	12000	25312	37500	1385
p-n=1500-e=12000-q=200-d=0.25.15	Feasible	(P)	3600.6	29859	2.0747	37108	0.15509	12000	14812	27000	9568
p-n=1500-e=12000-q=200-d=0.25.15	Feasible	(STM)	3600.1	25825	8.0338	37077	0.35737	12000	25312	49500	653
p-n=1500-e=12000-q=200-d=0.25.16	Feasible	(U)	3600	31574	0.79888	37274	0.061284	12000	14847	27000	1262
p-n=1500-e=12000-q=200-d=0.25.16	Feasible	(I)	3600.8	22678	15.324	35264	0.49265	12000	25347	49500	655
p-n=1500-e=12000-q=200-d=0.25.16	Feasible	(L)	3601.3	28135	11.184	35264	0.20208	12000	25347	37500	2118
p-n=1500-e=12000-q=200-d=0.25.16	Feasible	(P)	3600.7	23118	3.0835	37074	0.48711	12000	14847	27000	5703
p-n=1500-e=12000-q=200-d=0.25.16	Feasible	(STM)	3600.4	29652	8.0168	37054	0.17704	12000	25347	49500	586
p-n=1500-e=12000-q=200-d=0.25.17	Feasible	(U)	3601	26032	0.97385	37022	0.27146	12000	14831	27000	887
p-n=1500-e=12000-q=200-d=0.25.17	Feasible	(I)	3600.1	17560	21.944	35020	0.91267	12000	25331	49500	578
p-n=1500-e=12000-q=200-d=0.25.17	Feasible	(L)	3600.2	30201	8.3237	35020	0.11619	12000	25331	37500	1180
p-n=1500-e=12000-q=200-d=0.25.17	Feasible Feasible	(P) (STM)	3600.5 $3600.7$	24610 $28014$	2.6416 13.193	36844 36762	0.38017 $0.23553$	12000 12000	14831 25331	27000 49500	7488 531
p-n=1500-e=12000-q=200-d=0.25.17											
p-n=1500-e=12000-q=200-d=0.25.18 p-n=1500-e=12000-q=200-d=0.25.18	Feasible Feasible	(U) (I)	3600.2 3600.3	31393 14803	0.50192 $16.546$	37027 34985	0.05939 $1.2729$	12000 12000	14825 $25325$	27000 49500	2382 595
p-n=1500-e=12000-q=200-d=0.25.18 p-n=1500-e=12000-q=200-d=0.25.18	Feasible	(L)	3600.3	27953	9.7065	34985	0.20647	12000	25325	37500	795
p-n=1500-e=12000-q=200-d=0.25.18 p-n=1500-e=12000-q=200-d=0.25.18	Feasible	(P)	3600.2	29407	1.6807	36841	0.1614	12000	14825	27000	10581
p-n=1500-e=12000-q=200-d=0.25.18	Feasible	(STM)	3600.5	29598	7.8918	36782	0.17036	12000	25325	49500	596
p-n=1500-e=12000-q=200-d=0.25.19	Feasible	(U)	3600.4	31850	0.6389	37470	0.061136	12000	14810	27000	968
p-n=1500-e=12000-q=200-d=0.25.19	Feasible	(I)	3600.7	26921	13.889	35477	0.26995	12000	25310	49500	2081
p-n=1500-e=12000-q=200-d=0.25.19	Feasible	(L)	3600.2	28349	4.5123	35477	0.20863	12000	25310	37500	800
p-n=1500-e=12000-q=200-d=0.25.19	Feasible	(P)	3600.3	31090	1.2658	37285	0.11574	12000	14810	27000	11166
p-n=1500-e=12000-q=200-d=0.25.19	Feasible	(STM)	3601.4	26969	18.266	37154	0.30131	12000	25310	49500	480
p-n=2000-e=16000-q=200-d=0.25.0	Feasible	(U)	3600.4	40264	1.1078	48638	0.085614	16000	19763	36000	576
p-n=2000-e=16000-q=200-d=0.25.0	Feasible	(I)	3600.4	3560	603.95	45970	11.433	16000	33763	66000	498
p-n=2000-e=16000-q=200-d=0.25.0	Feasible	(L)	3600.5	33420	10.493	45970	0.32383	16000	33763	50000	538
p-n=2000-e=16000-q=200-d=0.25.0	Feasible	(P)	3600.8	26567	4.6453	48396	0.6974	16000	19763	36000	6870
p-n=2000-e=16000-q=200-d=0.25.0	Feasible	(STM)	3610.6	34135	20.713	48313	0.33912	16000	33763	66000	498
p-n=2000-e=16000-q=200-d=0.25.1	Feasible	(U)	3600.3	40754	1.1028	49396	0.096931	16000	19739	36000	500
p-n=2000-e=16000-q=200-d=0.25.1	Feasible	(I)	3600.7	24225	20.707	46809	0.85501	16000	33739	66000	474
p-n=2000-e=16000-q=200-d=0.25.1	Feasible	(L)	3600.1	33902	11.146	46809	0.32736	16000	33739	50000	523
p-n=2000-e=16000-q=200-d=0.25.1 p-n=2000-e=16000-q=200-d=0.25.1	Feasible Feasible	(P) (STM)	3600.5 3600.3	39027 29636	2.6256 $28.108$	49164 49068	0.16763 $0.59056$	16000 16000	19739 33739	36000 66000	6400 10
p-n=2000-e=16000-q=200-d=0.25.1 p-n=2000-e=16000-q=200-d=0.25.2	Feasible Feasible		3600.3 3600.6	$\frac{29636}{41255}$	28.108 1.6598	49068 49220	0.59056 $0.071414$	16000	33739 19767	36000	10 544
p-n=2000-e=16000-q=200-d=0.25.2 p-n=2000-e=16000-q=200-d=0.25.2	Feasible Feasible	(U) (I)	3600.6	41255 39359	1.6598 25.03	49220 46696	0.071414 $0.1409$	16000	33767	66000	544 504
p-n=2000-e=16000-q=200-d=0.25.2 p-n=2000-e=16000-q=200-d=0.25.2	Feasible Feasible	(L)	3600.3	39339	25.03 11.964	46696	0.1409	16000	33767	50000	565
p-n=2000-e=16000-q=200-d=0.25.2 p-n=2000-e=16000-q=200-d=0.25.2	Feasible Feasible	(E) (P)	3600.6	39838	2.3136	48960	0.12379	16000	19767	36000	5373
p-n=2000-e=16000-q=200-d=0.25.2 p-n=2000-e=16000-q=200-d=0.25.2	Feasible	(STM)	3600.5	31345	75.386	49017	0.17897	16000	33767	66000	502
p-n=2000-e=16000-q=200-d=0.25.2 p-n=2000-e=16000-q=200-d=0.25.3	Feasible	(U)	3600.7	40944	1.1348	49331	0.083542	16000	19742	36000	605
p-n=2000-e=16000-q=200-d=0.25.3	Feasible	(I)	3600.7	34204	11.21	46692	0.31097	16000	33742	66000	567
p-n=2000-e=16000-q=200-d=0.25.3	Feasible	(L)	3600.2	39072	4.9253	46692	0.15146	16000	33742	50000	557
p-n=2000-e=16000-q=200-d=0.25.3	Feasible	(P)	3600.2	38786	1.6538	49066	0.17993	16000	19742	36000	7003
p-n=2000-e=16000-q=200-d=0.25.3	Feasible	(STM)	3601.4	32246	15.096	48982	0.44456	16000	33742	66000	477
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filename	status	formulation	time A	ll Instance	es - Part 5 relax_time	relax_value		edges	columns	rows	nodes
p-n=2000-e=16000-q=200-d=0.25.4	Feasible	(U)	3600.4	40466	1.4128	48750	gap 0.084981	16000	19762	36000	469
p-n=2000-e=16000-q=200-d=0.25.4	Feasible	(I)	3601.3	38350	37.795	46243	0.15784	16000	33762	66000	698
p-n=2000-e=16000-q=200-d=0.25.4	Feasible	(L)	3600.2	4353.1	13.284	46243	9.1987	16000	33762	50000	607
p-n=2000-e=16000-q=200-d=0.25.4	Feasible	(P)	3600.8	37321	3.8174	48518	0.21063	16000	19762	36000	7168
p-n=2000-e=16000-q=200-d=0.25.4	Feasible	(STM)	3600.5	30398	40.134	48450	0.53008	16000	33762	66000	100
p-n=2000-e=16000-q=200-d=0.25.5	Feasible	(U)	3600.1	40546	1.2168	48867	0.086614	16000	19754	36000	489
p-n=2000-e=16000-q=200-d=0.25.5	Feasible	(I)	3601.3	28840	21.181	46201	0.54387	16000	33754	66000	489
p-n=2000-e=16000-q=200-d=0.25.5	Feasible	(L)	3600.1	37633	11.357	46201	0.18235	16000	33754	50000	789
p-n=2000-e=16000-q=200-d=0.25.5	Feasible	(P)	3601	39184	3.5495	48578	0.15711	16000	19754	36000	8360
p-n=2000-e=16000-q=200-d=0.25.5	Feasible	(STM)	3612.7	34203	22.458	48662	0.34742	16000	33754	66000	489
p-n=2000-e=16000-q=200-d=0.25.6	Feasible	(U)	3600.3	41583	0.89086	49957	0.080863	16000	19762	36000	515
p-n=2000-e=16000-q=200-d=0.25.6 p-n=2000-e=16000-q=200-d=0.25.6	Feasible Feasible	(I) (L)	3601 3600.6	39443 38708	30.818 15.04	47389 47389	0.15581 $0.17726$	16000 16000	33762 33762	66000 50000	497 744
p-n=2000-e=16000-q=200-d=0.25.6 p-n=2000-e=16000-q=200-d=0.25.6	Feasible	(P)	3600.0	41928	2.3266	49725	0.17726	16000	19762	36000	7627
p-n=2000-e=16000-q=200-d=0.25.6	Feasible	(STM)	3600.5	35467	44.429	49611	0.32327	16000	33762	66000	497
p-n=2000-e=16000-q=200-d=0.25.7	Feasible	(U)	3601.2	41265	1.6258	49843	0.082272	16000	19759	36000	519
p-n=2000-e=16000-q=200-d=0.25.7	Feasible	(I)	3601.2	39548	43.638	47198	0.15085	16000	33759	66000	494
p-n=2000-e=16000-q=200-d=0.25.7	Feasible	(L)	3602	38436	15.967	47198	0.18959	16000	33759	50000	494
p-n=2000-e=16000-q=200-d=0.25.7	Feasible	(P)	3600.4	25074	5.1942	49588	0.84574	16000	19759	36000	3866
p-n=2000-e=16000-q=200-d=0.25.7	Feasible	(STM)	3601.3	29928	30.765	49501	0.57636	16000	33759	66000	494
p-n=2000-e=16000-q=200-d=0.25.8	Feasible	(U)	3601	39173	1.0658	49967	0.1455	16000	19766	36000	672
p-n=2000-e=16000-q=200-d=0.25.8	Feasible	(I)	3600.3	26435	22.787	47220	0.71904	16000	33766	66000	531
p-n=2000-e=16000-q=200-d=0.25.8	Feasible	(L)	3601.4	40554	13.412	47220	0.12106	16000	33766	50000	604
p-n=2000-e=16000-q=200-d=0.25.8	Feasible	(P)	3600.5	41140	2.6446	49696	0.12612	16000	19766	36000	5472
p-n=2000-e=16000-q=200-d=0.25.8	Feasible	(STM)	3601.3	36018	46.429	49616	0.30523	16000	33766	66000	501
p-n=2000-e=16000-q=200-d=0.25.9	Feasible Feasible	(U)	3600.3 3601.4	41112 $25505$	1.5068 $34.413$	48928 46299	0.067601 $0.74568$	16000 16000	19766 33766	36000 66000	501 501
p-n=2000-e=16000-q=200-d=0.25.9		(I)									
p-n=2000-e=16000-q=200-d=0.25.9 p-n=2000-e=16000-q=200-d=0.25.9	Feasible	(L)	3600.9	39664	15.145 $4.4293$	46299 48685	0.12194	16000 16000	33766 19766	50000 36000	902 7672
p-n=2000-e=16000-q=200-d=0.25.9 p-n=2000-e=16000-q=200-d=0.25.9	Feasible Feasible	(P) (STM)	3601.3 3610.2	37679 $35520$	4.4293 75.19	48685 48604	0.2057 $0.30779$	16000	33766	36000 66000	501
p-n=2000-e=16000-q=200-d=0.25.10	Feasible	(U)	3600.4	41502	1.5828	49206	0.062947	16000	19754	36000	461
p-n=2000-e=16000-q=200-d=0.25.10	Feasible	(I)	3600.3	3566	36.395	46573	11.573	16000	33754	66000	489
p-n=2000-e=16000-q=200-d=0.25.10	Feasible	(L)	3600.3	19664	12.669	46573	1.2786	16000	33754	50000	618
p-n=2000-e=16000-q=200-d=0.25.10	Feasible	(P)	3601.7	38994	4.5173	48956	0.17103	16000	19754	36000	6160
p-n=2000-e=16000-q=200-d=0.25.10	Feasible	(STM)	3600.5	24218	67.033	48809	0.90763	16000	33754	66000	489
p-n=2000-e=16000-q=200-d=0.25.11	Feasible	(U)	3600.7	42119	1.2128	50146	0.06726	16000	19744	36000	506
p-n=2000-e=16000-q=200-d=0.25.11	Feasible	(I)	3601.8	3558	23.516	47424	11.812	16000	33744	66000	479
p-n=2000-e=16000-q=200-d=0.25.11	Feasible	(L)	3601.2	33764	11.287	47424	0.34991	16000	33744	50000	580
p-n=2000-e=16000-q=200-d=0.25.11	Feasible	(P)	3600.8	26444	4.7963	49873	0.7592	16000	19744	36000	4605
p-n=2000-e=16000-q=200-d=0.25.11	Feasible	(STM)	3602.5	26178	48.11	49864	0.80692	16000	33744	66000	479
p-n=2000-e=16000-q=200-d=0.25.12	Feasible	(U)	3600.9	40629	1.8907	48991	0.082484	16000	19733	36000	596
p-n=2000-e=16000-q=200-d=0.25.12	Feasible	(I)	3600.6	22713	26.386	46293	0.95844	16000	33733	66000	468
p-n=2000-e=16000-q=200-d=0.25.12	Feasible	(L)	3600.6	3542	18.524	46293	11.526	16000	33733	50000	508
p-n=2000-e=16000-q=200-d=0.25.12	Feasible	(P)	3600.8	9707.5	5.8191	48730	3.6803	16000	19733	36000	5995
p-n=2000-e=16000-q=200-d=0.25.12	Feasible	(STM)	3600.9	34008	25.844	48623	0.35523	16000	33733	66000	520
p-n=2000-e=16000-q=200-d=0.25.13 p-n=2000-e=16000-q=200-d=0.25.13	Feasible Feasible	(U) (I)	3600.8 3601.3	42670 30616	1.5388 28.994	50428 47536	0.060787 $0.49387$	16000 16000	19773 33773	36000 66000	599 453
p-n=2000-e=16000-q=200-d=0.25.13 p-n=2000-e=16000-q=200-d=0.25.13	Feasible	(L)	3600.8	36302	11.395	47536	0.25823	16000	33773	50000	524
p-n=2000-e=16000-q=200-d=0.25.13 p-n=2000-e=16000-q=200-d=0.25.13	Feasible	(P)	3601.3	41019	3.6804	50163	0.23823	16000	19773	36000	4479
p-n=2000-e=16000-q=200-d=0.25.13 p-n=2000-e=16000-q=200-d=0.25.13	Feasible	(STM)	3600.4	33402	19.754	50028	0.41288	16000	33773	66000	453
p-n=2000-e=16000-q=200-d=0.25.14	Feasible	(U)	3600.2	41352	2.0317	49939	0.084997	16000	19733	36000	535
p-n=2000-e=16000-q=200-d=0.25.14	Feasible	(I)	3601.2	26417	22.855	47263	0.71995	16000	33733	66000	488
p-n=2000-e=16000-q=200-d=0.25.14	Feasible	(L)	3600.5	40296	12.641	47263	0.12958	16000	33733	50000	470
p-n=2000-e=16000-q=200-d=0.25.14	Feasible	(P)	3600.9	39250	5.4362	49686	0.18131	16000	19733	36000	5894
p-n=2000-e=16000-q=200-d=0.25.14	Feasible	(STM)	3600.2	34945	32.326	49627	0.36536	16000	33733	66000	468
p-n=2000-e=16000-q=200-d=0.25.15	Feasible	(U)	3601.2	41348	1.1768	49798	0.081392	16000	19717	36000	780
p-n=2000-e=16000-q=200-d=0.25.15	Feasible	(I)	3600.1	22276	26.036	47125	1.0334	16000	33717	66000	462
p-n=2000-e=16000-q=200-d=0.25.15	Feasible	(L)	3600.8	29586	12.226	47125	0.53392	16000	33717	50000	1053
p-n=2000-e=16000-q=200-d=0.25.15	Feasible	(P)	3600.1	25763	2.7706	49536	0.79444	16000	19717	36000	9278
p-n=2000-e=16000-q=200-d=0.25.15	Feasible	(STM)	3600.3	34327	114.46	49583	0.37564	16000	33717	66000	452
p-n=2000-e=16000-q=200-d=0.25.16	Feasible	(U)	3600.2	40869	1.4058	48723	0.071993	16000	19746	36000	581
p-n=2000-e=16000-q=200-d=0.25.16	Feasible	(I)	3600.2	38928	31.457	46102	0.16268	16000	33746	66000	481
p-n=2000-e=16000-q=200-d=0.25.16	Feasible	(L)	3600.9	24094	7.8208	46102	0.8394	16000	33746	50000	481
p-n=2000-e=16000-q=200-d=0.25.16 p-n=2000-e=16000-q=200-d=0.25.16	Feasible Feasible	(P) (STM)	3600.4 3600.6	39214 33753	4.2614 $21.186$	48484 48416	$0.15406 \\ 0.3569$	16000 $16000$	19746 $33746$	36000 66000	3857 481
p-n=2000-e=16000-q=200-d=0.25.16 p-n=2000-e=16000-q=200-d=0.25.17	Feasible Feasible	(S1M) (U)	3600.6	42002	1.5808	49412	0.3569	16000	19766	36000	473
p-n=2000-e=16000-q=200-d=0.25.17 p-n=2000-e=16000-q=200-d=0.25.17	Feasible	(I)	3600.4	34406	34.734	46913	0.30982	16000	33766	66000	501
p-n=2000-e=16000-q=200-d=0.25.17	Feasible	(L)	3600.9	40616	11.326	46913	0.11287	16000	33766	50000	1002
p-n=2000-e=16000-q=200-d=0.25.17	Feasible	(P)	3601.4	39836	4.3413	49149	0.15329	16000	19766	36000	7172
p-n=2000-e=16000-q=200-d=0.25.17	Feasible	(STM)	3601.1	33029	23.829	49094	0.39917	16000	33766	66000	501
p-n=2000-e=16000-q=200-d=0.25.18	Feasible	(U)	3600.4	40506	1.1758	49577	0.096005	16000	19766	36000	531
p-n=2000-e=16000-q=200-d=0.25.18	Feasible	(I)	3600.3	29119	32.178	47008	0.54741	16000	33766	66000	501
p-n=2000-e=16000-q=200-d=0.25.18	Feasible	(L)	3600.3	33765	9.4256	47008	0.33581	16000	33766	50000	561
p-n=2000-e=16000-q=200-d=0.25.18	Feasible	(P)	3600.8	24877	3.3065	49351	0.83187	16000	19766	36000	5972
p-n=2000-e=16000-q=200-d=0.25.18	Feasible	(STM)	3601	30921	20.929	49217	0.5315	16000	33766	66000	101
p-n=2000-e=16000-q=200-d=0.25.19	Feasible	(U)	3600.4	41630	0.61291	49714	0.076245	16000	19759	36000	1067
p-n=2000-e=16000-q=200-d=0.25.19	Feasible	(I)	3601	25520	32.801	47035	0.77803	16000	33759	66000	494
p-n=2000-e=16000-q=200-d=0.25.19	Feasible	(L)	3600.1	39282	19.38	47035	0.15327	16000	33759	50000	592
p-n=2000-e=16000-q=200-d=0.25.19	Feasible	(P)	3600.4	22780 35300	3.0195	49459	1.0221	16000	19759	36000	6341
p-n=2000-e=16000-q=200-d=0.25.19	Feasible	(STM)	3601.6	35300	36.623	49426	0.34323	16000	33759	66000	201

llename	status	formulation	time	value	es - Part 6 relax_time	relax_value	gap	edges	columns	rows	$_{ m nodes}$
o-n=2500-e=20000-q=200-d=0.25.0	Feasible	(U)	3600.2	51228	1.3038	61659	0.083464	20000	24684	45000	544
o-n=2500-e=20000-q=200-d=0.25.0	Feasible	(I)	3600.3	31080	37.139	58292	0.81419	20000	42184	82500	524
o-n=2500-e=20000-q=200-d=0.25.0	Feasible	(L)	3600.4	47483	16.456	58292	0.18357	20000	42184	62500	524
o-n=2500-e=20000-q=200-d=0.25.0	Feasible	(P)	3601.1	48294	6.1561	61349	0.18561	20000	24684	45000	2795
o-n=2500-e=20000-q=200-d=0.25.0	Feasible	(STM)	3611.9	33315	58.911	61325	0.75057	20000	42184	82500	524
o-n=2500-e=20000-q=200-d=0.25.1 o-n=2500-e=20000-q=200-d=0.25.1	Feasible Feasible	(U) (I)	3601.4 3601.9	50641 35436	1.8027 33.09	62238 58880	0.10677 $0.59927$	20000 20000	$\frac{24658}{42158}$	$45000 \\ 82500$	470 498
o-n=2500-e=20000-q=200-d=0.25.1	Feasible	(L)	3600.2	31518	19.567	58880 58880	0.59927	20000	42158 42158	62500	538
o-n=2500-e=20000-q=200-d=0.25.1	Feasible	(P)	3600.2	48486	3.5495	61904	0.19507	20000	24658	45000	4969
o-n=2500-e=20000-q=200-d=0.25.1	Feasible	(STM)	3600.9	44726	44.125	61809	0.31358	20000	42158	82500	498
o-n=2500-e=20000-q=200-d=0.25.2	Feasible	(U)	3601.1	50687	2.3426	61497	0.095433	20000	24691	45000	505
o-n=2500-e=20000-q=200-d=0.25.2	Feasible	(I)	3600.7	48256	37.698	58252	0.18363	20000	42191	82500	0
o-n=2500-e=20000-q=200-d=0.25.2	Feasible	(L)	3600.5	44748	16.488	58252	0.2544	20000	42191	62500	476
o-n=2500-e=20000-q=200-d=0.25.2	Feasible	(P)	3601.3	35964	5.9211	61196	0.58984	20000	24691	45000	5502
o-n=2500-e=20000-q=200-d=0.25.2	Feasible	(STM)	3600.8	43607	38.261	61107	0.33951	20000	42191	82500	476
o-n=2500-e=20000-q=200-d=0.25.3	Feasible	(U)	3600.4	45297	2.2277	61344	0.22433	20000	24673	45000	483
o-n=2500-e=20000-q=200-d=0.25.3	Feasible	(I)	3601.2	4442	40.953	58132	11.67	20000	42173	82500	513
o-n=2500-e=20000-q=200-d=0.25.3	Feasible	(L)	3601.3	4442	23.055	58132	11.605	20000	42173	62500	553
o-n=2500-e=20000-q=200-d=0.25.3	Feasible	(P)	3600.1	35709	4.5503	61039	0.60216	20000	24673	45000	5402
o-n=2500-e=20000-q=200-d=0.25.3	Feasible	(STM)	3601	44681	68.859	61044	0.31118	20000	42173	82500	201
o-n=2500-e=20000-q=200-d=0.25.4	Feasible	(U)	3600.7	46631	1.2538	62623	0.20857	20000	24714	45000	529
o-n=2500-e=20000-q=200-d=0.25.4	Feasible	(1)	3600.9	4444	826.68	59324	11.907	20000	42214	82500	499
o-n=2500-e=20000-q=200-d=0.25.4	Feasible	(L)	3600.3	28982	34.045	59324	0.97081	20000	42214	62500	499
o-n=2500-e=20000-q=200-d=0.25.4	Feasible	(P)	3600.3	0	4.1534	62308	inf	20000	24714	45000	6953
o-n=2500-e=20000-q=200-d=0.25.4	Feasible	(STM)	3602	44468	66.902	62170	0.34526	20000	42214	82500	301
o-n=2500-e=20000-q=200-d=0.25.5	Feasible	(U)	3600.5	50643	2.4386	61826	0.10599	20000	24709	45000	466
o-n=2500-e=20000-q=200-d=0.25.5	Feasible	(I)	3600.9	26927	54.193	58635	1.1105	20000	42209	82500	494
o-n=2500-e=20000-q=200-d=0.25.5	Feasible	(L)	3600.4	4442	27.314	58635	11.739	20000	42209	62500	524
o-n=2500-e=20000-q=200-d=0.25.5	Feasible	(P)	3600.4	33726	3.7364	61552	0.70017	20000	24709	45000	6703
o-n=2500-e=20000-q=200-d=0.25.5	Feasible	(STM)	3600.1	39968	89.451	61393	0.47807	20000	42209	82500	494
o-n=2500-e=20000-q=200-d=0.25.6	Feasible	(U)	3600	45135	1.6458	62065	0.23827	20000	24687	45000	497
o-n=2500-e=20000-q=200-d=0.25.6	Feasible	(I)	3600.4	28865	43.379	58696	0.97105	20000	42187	82500	472
o-n=2500-e=20000-q=200-d=0.25.6	Feasible	(L)	3600.8	30237	8.4267	58696	0.8669	20000	42187	62500	472
o-n=2500-e=20000-q=200-d=0.25.6	Feasible	(P)	3600.7	32173 33356	4.3823 29.863	61763	0.79248	20000	24687 $42187$	45000 82500	$\frac{1498}{472}$
o-n=2500-e=20000-q=200-d=0.25.6	Feasible	(STM)	3603.6			61679	0.76414				
o-n=2500-e=20000-q=200-d=0.25.7	Feasible	(U)	3601.6	47766	1.4688	61663	0.16055	20000	24709	45000	464
o-n=2500-e=20000-q=200-d=0.25.7	Feasible Feasible	(I) (L)	3601.4 3600.9	46291 49028	993.11 21.77	58364 58364	0.23698 $0.15536$	20000 20000	42209 $42209$	82500 $62500$	495 496
o-n=2500-e=20000-q=200-d=0.25.7											
o-n=2500-e=20000-q=200-d=0.25.7 o-n=2500-e=20000-q=200-d=0.25.7	Feasible Feasible	(P) (STM)	3600.7 $3600.5$	49576 43309	4.1424 $145.29$	61385 61240	0.15525 $0.35857$	20000 20000	24709 42209	45000 82500	$\frac{4667}{494}$
o-n=2500-e=20000-q=200-d=0.25.7	Feasible	(U)	3601.2	52342	2.2936	62980	0.088183	20000	24679	45000	494
o-n=2500-e=20000-q=200-d=0.25.8	Feasible	(I)	3600.3	4456	67.395	59556	12.024	20000	42179	82500	519
o-n=2500-e=20000-q=200-d=0.25.8	Feasible	(L)	3601	4456	54.724	59556	11.832	20000	42179	62500	519
o-n=2500-e=20000-q=200-d=0.25.8	Feasible	(P)	3600.8	49306	4.7773	62656	0.18715	20000	24679	45000	4490
o-n=2500-e=20000-q=200-d=0.25.8	Feasible	(STM)	3602.5	41231	48.686	62558	0.44011	20000	42179	82500	519
o-n=2500-e=20000-q=200-d=0.25.9	Feasible	(U)	3600.5	47899	1.5298	62378	0.17488	20000	24670	45000	480
o-n=2500-e=20000-q=200-d=0.25.9	Feasible	(I)	3600.7	23584	55.764	59096	1.4228	20000	42170	82500	510
o-n=2500-e=20000-q=200-d=0.25.9	Feasible	(L)	3600.7	40245	34.14	59096	0.41301	20000	42170	62500	611
o-n=2500-e=20000-q=200-d=0.25.9	Feasible	(P)	3600.2	32912	6.584	62049	0.75931	20000	24670	45000	4123
o-n=2500-e=20000-q=200-d=0.25.9	Feasible	(STM)	3602.9	44770	79.927	62137	0.33293	20000	42170	82500	401
o-n=2500-e=20000-q=200-d=0.25.10	Feasible	(U)	3600.2	43812	1.6058	61524	0.26863	20000	24672	45000	482
o-n=2500-e=20000-q=200-d=0.25.10	Feasible	(I)	3601.8	33700	57.967	58270	0.68	20000	42172	82500	512
o-n=2500-e=20000-q=200-d=0.25.10	Feasible	(L)	3601.2	39764	17.925	58270	0.40939	20000	42172	62500	518
o-n=2500-e=20000-q=200-d=0.25.10	Feasible	(P)	3602.1	48741	7.1269	61221	0.17734	20000	24672	45000	3483
o-n=2500-e=20000-q=200-d=0.25.10	Feasible	(STM)	3601	44018	48.367	61053	0.32724	20000	42172	82500	540
o-n=2500-e=20000-q=200-d=0.25.11	Feasible	(U)	3601.6	50356	2.3326	61719	0.10415	20000	24713	45000	768
o-n=2500-e=20000-q=200-d=0.25.11	Feasible	(I)	3607.6	28780	55.56	58322	0.961	20000	42213	82500	498
o-n=2500-e=20000-q=200-d=0.25.11	Feasible	(L)	3600.8	35632	25.237	58322	0.5782	20000	42213	62500	498
o-n=2500-e=20000-q=200-d=0.25.11	Feasible	(P)	3603.1	28457	8.1967	61384	1.0189	20000	24713	45000	3269
o-n=2500-e=20000-q=200-d=0.25.11	Feasible	(STM)	3601.2	45007	39.884	61279	0.30396	20000	42213	82500	498
o-n=2500-e=20000-q=200-d=0.25.12	Feasible	(U)	3600.4	50989	1.6578	61463	0.090867	20000	24714	45000	542
o-n=2500-e=20000-q=200-d=0.25.12	Feasible	(I)	3600.9	46153	24.457	58373	0.24265	20000	42214	82500	201
o-n=2500-e=20000-q=200-d=0.25.12	Feasible	(L)	3600.4	36621	18.977	58373	0.53708	20000	42214	62500	589
o-n=2500-e=20000-q=200-d=0.25.12	Feasible	(P)	3601.1	48690	3.7804	61165	0.17667	20000	24714	45000	5170
o-n=2500-e=20000-q=200-d=0.25.12	Feasible	(STM)	3600.9	32296 46695	184.56 2.6676	61086	0.80145	20000	42214 $24706$	82500 45000	499 461
o-n=2500-e=20000-q=200-d=0.25.13	Feasible	(U)	3609.7	$\frac{46695}{26447}$		61450 $58170$	0.19028	20000	24706 42206	45000 82500	461 491
o-n=2500-e=20000-q=200-d=0.25.13	Feasible	(I)	3600.1		44.317		1.1239	20000	42206 42206		
o-n=2500-e=20000-q=200-d=0.25.13 o-n=2500-e=20000-q=200-d=0.25.13	Feasible Feasible	(L) (P)	3600.5 3601.1	4444 $47288$	16.279 $5.3472$	58170 61128	11.592 $0.20849$	20000 20000	42206 24706	62500 $45000$	$\frac{511}{3562}$
o-n=2500-e=20000-q=200-d=0.25.13 o-n=2500-e=20000-q=200-d=0.25.13	Feasible	(STM)	3601.1	30501	37.459	61018	0.20849	20000	42206	82500	0
o-n=2500-e=20000-q=200-d=0.25.13 o-n=2500-e=20000-q=200-d=0.25.14		(STM) (U)	3602.8	51906	2.6776	62252	0.92125	20000	42206 24708	45000 45000	401
o-n=2500-e=20000-q=200-d=0.25.14 o-n=2500-e=20000-q=200-d=0.25.14	Feasible	(I)	3601	48521	32.719	62252 59085	0.094931 $0.17669$		24708 42208	45000 82500	493
	Feasible Feasible		3602.7	48521	42.434	59085 59085	0.17669	20000 20000	42208 42208	62500	493
o-n=2500-e=20000-q=200-d=0.25.14 o-n=2500-e=20000-q=200-d=0.25.14	Feasible	(L) (P)	3600.2	27663	5.4642	61950	1.092	20000	42208 24708	45000	$\frac{466}{5457}$
o-n=2500-e=20000-q=200-d=0.25.14 o-n=2500-e=20000-q=200-d=0.25.14	Feasible	(STM)	3600.5	39993	53.001	61862	0.48993	20000	42208	82500	200
o-n=2500-e=20000-q=200-d=0.25.14	Feasible	(U)	3600.8	51998	2.7176	62570	0.48993	20000	24680	45000	492
o-n=2500-e=20000-q=200-d=0.25.15 o-n=2500-e=20000-q=200-d=0.25.15	Feasible	(I)	3600.8	32365	34.184	59184	0.093359	20000	42180	82500	520
			3600.8	32365 4460	34.184	59184 59184	11.769	20000	42180 42180	62500	520 540
n-n-2500-e-20000-a-200-d-0-25-15											
o-n=2500-e=20000-q=200-d=0.25.15 o-n=2500-e=20000-q=200-d=0.25.15	Feasible Feasible	(L) (P)	3600.2	28928	5.6032	62287	1.0136	20000	24680	45000	3591

filename	status	formulation	time	value	es - Part 7 relax_time	relax_value	gap	edges	columns	rows	nodes
p-n=2500-e=20000-q=200-d=0.25.16	Feasible	(U)	3601.2	51456	1.9847	62404	0.094532	20000	24684	45000	539
p-n=2500-e=20000-q=200-d=0.25.16	Feasible	(I)	3600.1	38782	23.962	59195	0.47223	20000	42184	82500	524
p-n=2500-e=20000-q=200-d=0.25.16	Feasible	(L)	3600.6	46166	30.35	59195	0.2356	20000	42184	62500	524
o-n=2500-e=20000-q=200-d=0.25.16	Feasible	(P)	3600.9	35870	6.0011	62080	0.62111	20000	24684	45000	3195
o-n=2500-e=20000-q=200-d=0.25.16	Feasible	(STM)	3601.8	45404	144.6	62005	0.31255	20000	42184	82500	301
o-n=2500-e=20000-q=200-d=0.25.17	Feasible	(U)	3601.8	41508	2.5546	61003	0.33029	20000	24683	45000	493
o-n=2500-e=20000-q=200-d=0.25.17	Feasible	(I)	3600.8	4444	32.085	57728	11.572	20000	42183	82500	523
o-n=2500-e=20000-q=200-d=0.25.17	Feasible	(L)	3600.2	27736	16.779	57728	1.0031	20000	42183	62500	533
o-n=2500-e=20000-q=200-d=0.25.17	Feasible	(P)	3600.1	28346	3.7924	60684	1.0066	20000	24683	45000	6811
o-n=2500-e=20000-q=200-d=0.25.17	Feasible	(STM)	3601.7	41931	44.179	60616	0.38808	20000	42183	82500	201
o-n=2500-e=20000-q=200-d=0.25.18	Feasible	(U)	3600.2	47648	1.9417	61363	0.17088	20000	24710	45000	322
o-n=2500-e=20000-q=200-d=0.25.18	Feasible	(I)	3600.5	49756	33.319	57959	0.12476	20000	42210	82500	497
o-n=2500-e=20000-q=200-d=0.25.18	Feasible	(L)	3600.6	46985	15.997	57959	0.2144	20000	42210	62500	0
o-n=2500-e=20000-q=200-d=0.25.18	Feasible	(P)	3604.1	51000	5.9181	61035	0.11801	20000	24710	45000	3766
p-n=2500-e=20000-q=200-d=0.25.18	Feasible	(STM)	3602	43126	38.208	60945	0.34495	20000	42210	82500	495
o-n=2500-e=20000-q=200-d=0.25.19	Feasible	(U)	3600.1	51544	1.4208	62412	0.089775	20000	24717	45000	540
o-n=2500-e=20000-q=200-d=0.25.19	Feasible	(I)	3600.7	49215	45.198	59160	0.16453	20000	42217	82500	502
o-n=2500-e=20000-q=200-d=0.25.19	Feasible	(L)	3601.1	49843	14.318	59160	0.16905	20000	42217	62500	401
					5.0392			20000			
o-n=2500-e=20000-q=200-d=0.25.19	Feasible	(P)	3600.9	50353		62123	0.15233		24717	45000	4173
o-n=2500-e=20000-q=200-d=0.25.19	Feasible	(STM)	3601.1	45716	25.225	61909	0.29938	20000	42217	82500	501
o-n=3000-e=24000-q=200-d=0.25.0	Feasible	(U)	3600.1	61069	3.3185	73946	0.10508	24000	29630	54000	492
o-n=3000-e=24000-q=200-d=0.25.0	Feasible	(I)	3601.8	26922	58.349	69880	1.5067	24000	50630	99000	485
p-n=3000-e=24000-q=200-d=0.25.0	Feasible	(L)	3601.2	49780	65.797	69880	0.37838	24000	50630	75000	0
o-n=3000-e=24000-q=200-d=0.25.0	Feasible	(P)	3601.8	40769	7.6768	73578	0.68565	24000	29630	54000	891
o-n=3000-e=24000-q=200-d=0.25.0	Feasible	(STM)	3600.9	52529	85.1	73470	0.34065	24000	50630	99000	189
o-n=3000-e=24000-q=200-d=0.25.1	Feasible	`(U) ´	3601.1	55383	4.1764	74814	0.22563	24000	29608	54000	123
o-n=3000-e=24000-q=200-d=0.25.1	Feasible	(I)	3600.7	30259	66.113	70564	1.2875	24000	50608	99000	458
o-n=3000-e=24000-q=200-d=0.25.1	Feasible	(L)	3603.2	5352	40.376	70564	11.71	24000	50608	75000	458
o-n=3000-e=24000-q=200-d=0.25.1	Feasible	(P)	3601.3	57499	8.0198	74382	0.21036	24000	29608	54000	869
o-n=3000-e=24000-q=200-d=0.25.1	Feasible	(STM)	3600.4	53292	47.403	74399	0.34033	24000	50608	99000	71
p-n=3000-e=24000-q=200-d=0.25.2	Feasible	(U)	3601.6	56923	3.1885	73980	0.17266	24000	29618	54000	479
	Feasible		3601.9	36611	46.508	69879	0.84107	24000	50618	99000	468
o-n=3000-e=24000-q=200-d=0.25.2 o-n=3000-e=24000-q=200-d=0.25.2	Feasible	(I) (L)	3600.8	33311	27.81	69879	1.0176	24000	50618	75000	468
p-n=3000-e=24000-q=200-d=0.25.2	Feasible	(P)	3601.1	58034	9.3336	73590	0.18813	24000	29618	54000	1979
o-n=3000-e=24000-q=200-d=0.25.2	Feasible	(STM)	3608.6	49554	61.474	73589	0.41495	24000	50618	99000	468
o-n=3000-e=24000-q=200-d=0.25.3	Feasible	(U)	3602.3	61479	3.1445	74226	0.10298	24000	29618	54000	480
o-n=3000-e=24000-q=200-d=0.25.3	Feasible	(I)	3602.6	37976	770.86	70240	0.81656	24000	50618	99000	0
p-n=3000-e=24000-q=200-d=0.25.3	Feasible	(L)	3602.6	44412	69.213	70240	0.55713	24000	50618	75000	469
o-n=3000-e=24000-q=200-d=0.25.3	Feasible	(P)	3600.2	56260	6.8929	73843	0.22996	24000	29618	54000	4107
p-n=3000-e=24000-q=200-d=0.25.3	Feasible	(STM)	3602.7	53237	80.692	73693	0.32892	24000	50618	99000	201
p-n=3000-e=24000-q=200-d=0.25.4	Feasible	(U)	3600.8	55337	3.0995	73760	0.21931	24000	29615	54000	264
p-n=3000-e=24000-q=200-d=0.25.4	Feasible	(I)	3600.2	36963	66.271	69780	0.85297	24000	50615	99000	465
p-n=3000-e=24000-q=200-d=0.25.4	Feasible	(L)	3600.5	5322	41.88	69780	11.908	24000	50615	75000	0
p-n=3000-e=24000-q=200-d=0.25.4	Feasible	(P)	3600.9	14442	5.6711	73382	3.7608	24000	29615	54000	5476
p-n=3000-e=24000-q=200-d=0.25.4	Feasible	(STM)	3600.3	53352	148.21	73334	0.31954	24000	50615	99000	187
p-n=3000-e=24000-q=200-d=0.25.5	Feasible	(U)	3600.6	56614	2.3157	74338	0.19695	24000	29621	54000	182
p-n=3000-e=24000-q=200-d=0.25.5	Feasible	(I)	3602	38532	989.3	70207	0.79082	24000	50621	99000	101
	Feasible		3600.8	37101	43.632	70207	0.82992	24000	50621	75000	541
p-n=3000-e=24000-q=200-d=0.25.5		(L)									
p-n=3000-e=24000-q=200-d=0.25.5	Feasible	(P)	3601.3	57810	5.1422	73957	0.19674	24000	29621	54000	4532
o-n=3000-e=24000-q=200-d=0.25.5	Feasible	(STM)	3602.4	51031	202.59	73864	0.3906	24000	50621	99000	101
o-n=3000-e=24000-q=200-d=0.25.6	Feasible	(U)	3601	52834	2.5656	73780	0.26537	24000	29676	54000	481
p-n=3000-e=24000-q=200-d=0.25.6	Feasible	(I)	3600.9	5332	61.638	69930	11.883	24000	50676	99000	0
o-n=3000-e=24000-q=200-d=0.25.6	Feasible	(L)	3600.2	31485	50.153	69930	1.1507	24000	50676	75000	471
p-n=3000-e=24000-q=200-d=0.25.6	Feasible	(P)	3600.5	57018	6.1021	73422	0.21094	24000	29676	54000	8282
p-n=3000-e=24000-q=200-d=0.25.6	Feasible	(STM)	3601.8	39244	122.19	73201	0.79421	24000	50676	99000	201
p-n=3000-e=24000-q=200-d=0.25.7	Feasible	`(U) ´	3607.2	60816	2.1897	75126	0.12245	24000	29590	54000	452
o-n=3000-e=24000-q=200-d=0.25.7	Feasible	(I)	3601.7	42498	1209.4	71195	0.64651	24000	50590	99000	401
o-n=3000-e=24000-q=200-d=0.25.7	Feasible	(L)	3602.1	34680	14.545	71195	0.97886	24000	50590	75000	596
o-n=3000-e=24000-q=200-d=0.25.7	Feasible	(P)	3600.8	0	7.9318	74782	inf	24000	29590	54000	1351
o-n=3000-e=24000-q=200-d=0.25.7	Feasible	(STM)	3601.9	32639	54.47	74681	1.1972	24000	50590	99000	401
o-n=3000-e=24000-q=200-d=0.25.8	Feasible	(U)	3600.4	61294	2.1917	73800	0.090284	24000	29607	54000	469
o-n=3000-e=24000-q=200-d=0.25.8	Feasible	(I)	3601.5	5320	95.296	69936	11.762	24000	50607	99000	457
o-n=3000-e=24000-q=200-d=0.25.8	Feasible	(L)	3600.9	46321	36.163	69936	0.45392	24000	50607	75000	478
o-n=3000-e=24000-q=200-d=0.25.8	Feasible	(P)	3600.6	37823	8.9606	73434	0.82346	24000	29607	54000	3267
o-n=3000-e=24000-q=200-d=0.25.8	Feasible	(STM)	3601.8	33292	167.68	73470	1.1208	24000	50607	99000	301
o-n=3000-e=24000-q=200-d=0.25.9	Feasible	(U)	3601.3	61037	2.8336	74145	0.10777	24000	29604	54000	465
o-n=3000-e=24000-q=200-d=0.25.9	Feasible	(I)	3600.4	59288	74.472	70188	0.16105	24000	50604	99000	456
o-n=3000-e=24000-q=200-d=0.25.9	Feasible	(L)	3600.8	40394	20.035	70188	0.66879	24000	50604	75000	454
p-n=3000-e=24000-q=200-d=0.25.9	Feasible	(P)	3600.9	60881	7.5529	73758	0.1351	24000	29604	54000	2165
p-n=3000-e=24000-q=200-d=0.25.9	Feasible	(STM)	3600.4	43251	98.095	73721	0.63524	24000	50604	99000	190
p-n=3000-e=24000-q=200-d=0.25.10	Feasible	`(U) ´	3604.4	57504	3.3955	74242	0.17473	24000	29653	54000	458
p-n=3000-e=24000-q=200-d=0.25.10	Feasible	(I)	3602.1	5324	59.024	70232	11.955	24000	50653	99000	504
o-n=3000-e=24000-q=200-d=0.25.10	Feasible	(L)	3600.5	40749	19.744	70232	0.66049	24000	50653	75000	503
p-n=3000-e=24000-q=200-d=0.25.10	Feasible	(P)	3601.6	46130	9.4966	73883	0.49579	24000	29653	54000	2159
p-n=3000-e=24000-q=200-d=0.25.10	Feasible	(STM)	3600.1	52226	52.778	73645	0.35517	24000	50653	99000	503
					2.6226			24000		54000	
p-n=3000-e=24000-q=200-d=0.25.11	Feasible	(U)	3606.7	61462		74424	0.1031		29636		498
p-n=3000-e=24000-q=200-d=0.25.11	Feasible	(I)	3600.2	33081	1088.7	70440	1.0925	24000	50636	99000	486
o-n=3000-e=24000-q=200-d=0.25.11	Feasible	(L)	3600.5	31068	70.877	70440	1.1919	24000	50636	75000	486
o-n=3000-e=24000-q=200-d=0.25.11	Feasible	(P)	3601.4	38169	6.349	74067	0.81998	24000	29636	54000	2197
						73965					

				Table v	with Means a	and Standard	Deviations					
group	formulation	optimal	feasible	time	$time\_d$	relax_time	$relax\_time\_d$	nodes	nodes_d	gap	gap_d	gap_improvement
p-n=500-e=4000-q=200-d=0.25	(U)	0	20	3600.1	0.048073	0.14313	0.034121	11981	1829.8	0.033033	0.0091017	0.12852
p-n=500-e=4000-q=200-d=0.25	(I)	0	20	3600.2	0.11969	2.6909	0.66179	7518.4	1802.1	0.042631	0.01014	0.060323
p-n=500-e=4000-q=200-d=0.25	(L)	0	20	3600.2	0.10895	1.4284	0.23066	10563	2813.3	0.032001	0.0092344	0.067882
p-n=500-e=4000-q=200-d=0.25	(P)	0	20	3600.2	0.079366	0.41154	0.078849	56401	13162	0.055363	0.010754	0.098484
p-n=500-e=4000-q=200-d=0.25	(STM)	0	20	3600.3	0.12728	2.301	0.58875	7544.4	2136.9	0.10614	0.017733	0.061581
p-n=1000-e=8000-q=200-d=0.25	(U)	0	20	3600.4	0.42448	0.40879	0.073137	4239.8	1420.2	0.055863	0.015559	0.11128
p-n=1000-e=8000-q=200-d=0.25	(I)	0	20	3600.6	0.43439	7.1762	2.1786	2274.6	889.66	0.091002	0.031465	0.043043
p-n=1000-e=8000-q=200-d=0.25	(L)	0	20	3600.4	0.25806	4.4906	0.66709	3178.7	687.64	0.078219	0.028875	0.042484
p-n=1000-e=8000-q=200-d=0.25	(P)	0	20	3600.4	0.45634	1.1975	0.24202	13237	3025.3	0.091994	0.058986	0.08103
p-n=1000-e=8000-q=200-d=0.25	(STM)	0	20	3600.5	0.24633	8.7778	3.1042	1238.2	597.46	0.19839	0.064772	0.061416
p-n=1500-e=12000-q=200-d=0.25	(U)	0	20	3600.5	0.36337	0.79913	0.16976	1388.8	916.23	0.082484	0.046069	0.10847
p-n=1500-e=12000-q=200-d=0.25	(I)	0	20	3600.5	0.32549	32.408	43.2	830.05	438.77	0.97715	2.46	0.039261
p-n=1500-e=12000-q=200-d=0.25	(L)	0	20	3600.5	0.32387	8.0586	2.4291	1144.6	522.29	0.80212	2.4895	0.038338
p-n=1500-e=12000-q=200-d=0.25	(P)	0	20	3600.5	0.26637	2.3423	0.61529	8393.8	1738.6	0.2166	0.12783	0.075514
p-n=1500-e=12000-q=200-d=0.25	(STM)	0	20	3600.7	0.35565	25.356	15.348	551	56.828	0.26666	0.09531	0.06014
p-n=2000-e=16000-q=200-d=0.25	(U)	0	20	3600.5	0.31665	1.3466	0.33176	575.95	135.01	0.081491	0.017962	0.1126
p-n=2000-e=16000-q=200-d=0.25	(I)	0	20	3600.8	0.48224	57.344	125.6	503.45	50.528	2.1801	3.9698	0.038758
p-n=2000-e=16000-q=200-d=0.25	(L)	0	20	3600.7	0.47037	12.471	3.2472	635.6	167.46	1.3217	3.0486	0.03953
p-n=2000-e=16000-q=200-d=0.25	(P)	0	20	3600.8	0.40696	3.7574	1.1286	6278.2	1398.3	0.53785	0.78304	0.07324
p-n=2000-e=16000-q=200-d=0.25	(STM)	0	20	3602.4	3.7392	40.44	24.571	410.7	157.6	0.45521	0.16001	0.051248
p-n=2500-e=20000-q=200-d=0.25	(U)	0	20	3601.2	2.0139	1.9934	0.47989	498.45	79.698	0.15071	0.070598	0.10672
p-n=2500-e=20000-q=200-d=0.25	(I)	0	20	3601.2	1.5855	128.66	261.98	464.25	126.03	2.8627	4.4806	0.030497
p-n=2500-e=20000-q=200-d=0.25	(L)	0	20	3600.6	0.33158	24.386	10.815	489.6	120.39	3.2777	4.874	0.034795
p-n=2500-e=20000-q=200-d=0.25	(P)	0	20	3601.1	0.96943	5.2111	1.2211	4478.9	1383.8	Inf	NaN	0.069455
p-n=2500-e=20000-q=200-d=0.25	(STM)	0	20	3602.1	2.4169	74.434	51.182	380.75	169.91	0.47007	0.20163	0.042015
p-n=3000-e=24000-q=200-d=0.25	(U)	0	20	3603.3	6.6899	2.7972	0.75566	412.05	114.78	0.17739	0.063667	0.098938
p-n=3000-e=24000-q=200-d=0.25	(I)	0	20	3601	0.78717	249.73	389.43	400.85	156.61	3.588	4.7695	0.0233
p-n=3000-e=24000-q=200-d=0.25	(L)	0	20	3601.1	0.83761	37.22	19.354	395.3	189.37	2.9845	4.3844	0.032136
p-n=3000-e=24000-q=200-d=0.25	(P)	0	20	3600.9	0.4568	7.1675	2.2169	3365.9	2765.2	Inf	NaN	0.064216
p-n=3000-e=24000-q=200-d=0.25	(STM)	0	20	3601.7	1.8549	92.167	59.038	214.35	156.18	0.66203	0.37416	0.041789