Empirical Results

Improving Model Counting by Leveraging Definability

Tracking Number: #89

In the following we report two tables gathering the results of our experiments over 703 CNF instances.

The first table gives some details about the computations achieved by the $\mathtt{B} + \mathtt{E}$ preprocessor used upstream to a model counter (Cachet or sharpSAT) for computing the number of models of the input CNF instance Σ. Four instantiations of the max#C parameter (the number of conflicts allowed for the underlying SAT solver) have been considered (10, 100, 1000, ∞).

The columns of this table make precise, from the leftmost one to the right most one:

- some information concerning the input instance, namely:
  - the family of the input CNF instance, among the eight families considered in the experiments (Bayesian network, BMC, Circuit, Configuration, Handmade, Planning, Random, Qif);
  - the name of the instance;
  - the number of variables occurring in the instance;
  - the number of clauses of the instance;
  - the number of literals occurring in the instance (alias the size of the instance);
- and for each of the four instantiations of max#C under consideration:
  - the overall time (in seconds) used by $\mathtt{B} + \mathtt{E}$ to preprocess the instance;
  - the time (in seconds) used by B in the preprocessing;
  - the time (in seconds) used by E in the preprocessing;
  - the number of variables of the instance eliminated by $\mathtt{B} + \mathtt{E}$ (those found in the backbone of the instance, plus those forgotten using E), so that the number of variables in $\mathtt{B} + \mathtt{E}(\Sigma)$ is equal to the number of variables occurring in Σ (third column) minus the number reported in this column;
  - the number of clauses in $\mathtt{B} + \mathtt{E}(\Sigma)$;
  - the number of literals occurring in $\mathtt{B} + \mathtt{E}(\Sigma)$ (alias the size of $\mathtt{B} + \mathtt{E}(\Sigma)$);
  - the cardinality of I as found by B;
  - the cardinality of O as found by B;
  - the number of variables of the instance forgotten using E;
  - the time (in seconds) required by Cachet to count the number of models of $\mathtt{B} + \mathtt{E}(\Sigma)$ (including the preprocessing time);
  - the time (in seconds) required by sharpSAT to count the number of models of $\mathtt{B} + \mathtt{E}(\Sigma)$ (including the preprocessing time).

The second table aims at depicting the benefits obtained by using a preprocessor upstream to a model counter (Cachet or sharpSAT), by enabling to compare both the number of variables, the number of clauses and the sizes of the CNF instance obtained after preprocessing, as well as the preprocessing time, and the overall time required

by Cachet and by sharpSAT to count the number of models of the preprocessed instance. Three preprocessing scenarios are considered: no preprocessing, pmc (equipped with $\#eq$), and $\mathtt{B}+\mathtt{E}$ (with $\mathtt{max\#C} = \infty$).

The columns of this table make precise, from the leftmost one to the right most one:

- the information concerning the input instance, as in the previous table;
- for the no preprocessing scenario:
  - the time (in seconds) required by Cachet to count the number of models of the instance;
  - the time (in seconds) required by sharpSAT to count the number of models of the instance;
- and for each of the two remaining preprocessing scenarios (pmc and $\mathtt{B}+\mathtt{E}$):
  - the time (in seconds) used by to preprocess the instance;
  - the number of variables of the instance eliminated by the preprocessing so that the number of variables in the preprocessed instance is equal to the number of variables occurring in Σ (third column) minus the number reported in this column;
  - the number of clauses in the preprocessed instance;
  - the number of literals occurring in the preprocessed instance (alias the size of the preprocessed instance);
  - the time (in seconds) required by Cachet to count the number of models of the preprocessed instance (including the preprocessing time);
  - the time (in seconds) required by sharpSAT to count the number of models of the preprocessed instance (including the preprocessing time).

For the two tables, ”TO” means that the Cachet (or sharpSAT) did not succeed in computing the number of models of the instance (possibly after a preprocessing phase), within the time limit of 3600s (including the preprocessing time); when ”TO” happens, we did not report the information about the preprocessing (we put a ”?” instead).

Benchmark Information					B+E($\sum$, 10)										
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
Qif	binsearch.16.pp	251	1925	7321	0.011998	0.006998	0.005000	218	18	67	218	33	136	0.08	0.65
Qif	binsearch.16	2003	5637	13861	0.257961	0.194971	0.062990	1725	16	96	1725	278	1288	0.42	0.71
Qif	mixdup	309	452	1092	0.008998	0.008998	0	148	0	0	148	161	16	0.24	0.60
Qif	binsearch.32	4473	14011	35245	0.996849	0.730889	0.265960	4082	32	224	4082	391	2830	1.55	1.53
Qif	binsearch.32.pp	251	1917	7304	0.011998	0.006998	0.005000	218	18	67	218	33	136	0.62	0.47
Qif	10random	587	1685	4157	0.029995	0.017997	0.011998	458	0	0	458	129	350	0.70	0.55
Qif	sum.32	639	1708	4356	0.035994	0.034994	0.001000	510	0	0	510	129	378	0.78	0.43
Handmade	5_140_sd_schur	700	51600	151910	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	5_100_sd_schur	500	26860	78510	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	qg2-08	512	148957	584637	1.756733	1.649749	0.106984	511	0	0	511	1	83	1.89	2.34
Handmade	qg5-11	1331	64054	174879	0.475928	0.015998	0.459930	972	1277	3272	1327	4	41	1.42	0.99
Handmade	qg3-08	512	10469	25869	0.035995	0.023997	0.011998	267	1400	3398	466	46	0	1.17	0.47
Handmade	ls15-normalized	2562	31136	64442	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	ls9-normalized	456	2864	6056	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	qg7-09	729	22060	58744	0.076988	0.004000	0.072988	586	382	990	726	3	81	1.00	0.53
Handmade	ls16-normalized	3165	41595	85905	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	ls10-normalized	657	4761	10017	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	ls12-normalized	1221	11231	23441	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	qg6-09	729	21844	58024	0.101985	0.004000	0.097985	726	3	6	726	3	221	1.00	0.58
Handmade	ls13-normalized	1596	16248	33804	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	ls11-normalized	910	7480	15670	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	ls8-normalized	301	1603	3409	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	qg4-09	729	15580	39304	0.740888	0.681897	0.058991	315	4037	9632	597	132	12	13.80	14.39
Handmade	qg1-08	512	148957	580829	5.187212	5.097225	0.089987	302	3918	13305	458	54	0	6.48	5.42
Handmade	qg1-07	343	68083	263593	0.062991	0.017998	0.044993	189	1195	3132	330	13	0	0.96	0.52
Handmade	qg2-07	343	68083	265777	0.084987	0.017997	0.066990	169	2383	7256	304	39	0	1.09	0.44
Handmade	qg7-13	2197	97072	256426	3.293499	3.011542	0.281957	1141	15964	38720	1829	368	0	15.73	6.61
Handmade	ls14-normalized	2041	22789	47281	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	23_rd_r45	253	42504	389620	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	20_rd_r45	190	20349	184110	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	par8-3	350	1171	3115	0.001000	0	0.001000	350	0	0	350	0	0	0.06	0.56
Handmade	par16-2-c	349	1392	4054	0.457931	0.456931	0.001000	349	0	0	349	0	0	1.49	0.61
Handmade	par8-1-c	64	254	732	0	0	0	64	0	0	64	0	0	0.93	0.11
Handmade	par16-4-c	324	1292	3754	0.132980	0.132980	0	324	0	0	324	0	0	1.14	0.13
Handmade	par16-2	1015	3374	9044	0.429935	0.428935	0.001000	1015	0	0	1015	0	0	0.49	0.35
Handmade	par16-3-c	334	1332	3874	0.305954	0.304954	0.001000	334	0	0	334	0	0	1.30	0.28
Handmade	par8-2	350	1157	3059	0	0	0	350	0	0	350	0	0	0.05	0.23
Handmade	par8-4-c	67	266	768	0	0	0	67	0	0	67	0	0	0.99	0.38
Handmade	par8-2-c	68	270	780	0	0	0	68	0	0	68	0	0	1.03	0.45
Handmade	par16-1-c	317	1264	3670	0.310952	0.309952	0.001000	317	0	0	317	0	0	1.31	0.64
Handmade	par8-4	350	1155	3051	0.000999	0.000999	0	350	0	0	350	0	0	0.04	0.44
Handmade	par16-4	1015	3324	8844	0.128981	0.128981	0	1015	0	0	1015	0	0	1.07	0.53
Handmade	par8-5	350	1171	3115	0	0	0	350	0	0	350	0	0	1.02	0.55
Handmade	par8-5-c	75	298	864	0	0	0	75	0	0	75	0	0	0.97	0.40
Handmade	par16-1	1015	3310	8788	0.398940	0.397940	0.001000	1015	0	0	1015	0	0	0.45	0.60
Handmade	par16-3	1015	3344	8924	0.399939	0.399939	0	1015	0	0	1015	0	0	1.42	0.69
Handmade	par8-3-c	75	298	864	0	0	0	75	0	0	75	0	0	0.93	0.42
Handmade	par16-5-c	341	1360	3958	0.255961	0.254961	0.001000	341	0	0	341	0	0	1.20	0.56
Handmade	par8-1	350	1149	3027	0.001000	0.001000	0	350	0	0	350	0	0	1.01	0.53
Handmade	par16-5	1015	3358	8980	0.362945	0.362945	0	1015	0	0	1015	0	0	1.31	0.45
Handmade	fphp-015-020	300	4965	10200	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	fphp-010-020	200	2810	5800	?	?	?	?	?	?	?	?	?	3700	139.59
Handmade	ais12	265	5666	13003	73.507825	73.478829	0.028996	12	3986	12864	43	222	12	1123.50	3700
Handmade	ais10	181	3151	7255	0.805878	0.789880	0.015998	10	2194	7022	39	142	10	15.59	8.49
Handmade	ais6	61	581	1351	0.009998	0.003999	0.005999	8	345	1025	43	18	6	0.96	0.45
Handmade	ais8	113	1520	3515	0.081987	0.068989	0.012998	11	984	3085	41	72	8	0.97	0.46
Handmade	lang12	576	13584	28134	0.233965	0.103985	0.129980	192	4793	11921	416	160	12	2003.31	3700
Handmade	lang28	3136	174160	353934	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang23	2116	96370	196489	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang20	1600	63280	129370	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang16	1024	32320	66408	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang15	1024	32320	66408	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang24	2304	109536	223164	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang27	2916	156114	317439	?	?	?	?	?	?	?	?	?	3700	3700
Handmade	lang19	1444	54226	110979	?	?	?	?	?	?	?	?	?	3700	3700
Planning	bw_large.a	459	4675	10809	0.001000	0	0.001000	459	0	0	459	0	0	0.92	0.44
Planning	log-2	1337	24777	50017	0.403939	0.285957	0.117982	950	1752	4616	1080	257	413	1.47	0.76
Planning	prob005.pddl	2701	29534	59897	1.251810	1.071837	0.179973	1650	5194	13110	1821	880	674	168.44	19.90
Planning	tire-1	352	1038	2133	0.007998	0.006998	0.001000	270	181	463	281	71	104	0.33	0.38
Planning	bw_large.c	3016	50457	114314	0.045993	0.039994	0.005999	3013	1	2	3013	3	55	0.44	0.41
Planning	huge	459	7054	15567	0.001000	0	0.001000	459	0	0	459	0	0	0.94	0.39
Planning	logistics.b	843	7301	19024	0.076989	0.062991	0.013998	540	1287	3925	599	244	135	3.51	1.12
Planning	logistics.c	1141	10719	27978	0.149977	0.129980	0.019997	718	2367	7112	815	326	161	998.52	26.79
Planning	hanoi5	1931	14468	35856	0.444933	0.442933	0.002000	1931	0	0	1931	0	0	1.43	0.86
Planning	anomaly	48	261	583	0	0	0	48	0	0	48	0	0	0.95	0.33
Planning	tire-3	577	2004	4118	0.015997	0.014997	0.001000	433	318	700	435	142	68	0.96	0.36
Planning	bomb_b10_t10_p_t20	18480	36820	98820	28.594653	27.870763	0.723890	10020	0	0	10020	8460	9600	29.66	27.83
Planning	emptyroom_d4_g2_p_t6	224	698	1832	0.007998	0.005999	0.001999	164	238	789	189	35	164	0.97	0.37
Planning	emptyroom_d12_g6_p_t8	952	3350	8832	0.077988	0.048993	0.028995	754	1297	4301	862	90	754	2.64	0.68
Planning	safe_safe_10_p_t5	166	356	870	0.004999	0.000999	0.004000	106	36	72	106	60	106	1.02	0.32
Planning	safe_safe_30_p_t8	759	1892	4532	0.173973	0.038994	0.134979	87	1715	4865	488	271	87	1.19	0.53
Planning	comm_p01_p_t8	1218	3657	9481	0.159976	0.112983	0.046993	759	1798	6622	887	331	694	1.92	1.18
Planning	coins_p04_p_t8	1376	3757	9429	0.214968	0.202969	0.011999	881	872	1910	905	471	716	1.15	0.55

	B+E($\sum$, 100)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
binsearch.16.pp	0.012998	0.006999	0.005999	219	0	0	219	32	137	0.89	0.39
binsearch.16	0.254962	0.192971	0.061991	1725	16	96	1725	278	1288	0.41	1.00
mixdup	0.009998	0.009998	0	148	0	0	148	161	16	0.22	0.23
binsearch.32	0.990850	0.727890	0.262960	4082	32	224	4082	391	2830	1.28	1.29
binsearch.32.pp	0.013997	0.008998	0.004999	219	0	0	219	32	137	0.36	0.26
10random	0.028995	0.017997	0.010998	458	0	0	458	129	350	0.90	0.87
sum.32	0.034994	0.034994	0	510	0	0	510	129	378	0.98	0.83
5_140_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
5_100_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
qg2-08	1.748734	1.635751	0.112983	511	0	0	511	1	83	2.67	2.56
qg5-11	0.464929	0.014997	0.449932	972	1277	3272	1327	4	41	1.32	0.70
qg3-08	0.071989	0.057992	0.013997	267	1400	3395	504	8	0	1.06	0.44
ls15-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls9-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg7-09	0.079988	0.004000	0.075988	586	382	990	726	3	81	0.97	0.24
ls16-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls10-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls12-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg6-09	0.106984	0.004000	0.102984	726	3	6	726	3	221	0.99	0.32
ls13-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls11-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls8-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg4-09	1.778730	1.710740	0.067990	315	4037	9631	630	99	12	15.69	14.39
qg1-08	5.348187	5.242203	0.105984	302	3878	13109	498	14	0	6.47	5.64
qg1-07	0.066990	0.019997	0.046993	189	1093	2798	337	6	0	0.91	0.24
qg2-07	0.101985	0.030996	0.070989	169	2384	7240	333	10	0	1.03	0.41
qg7-13	5.184212	4.849263	0.334949	1141	15964	38720	1990	207	0	17.43	9.23
ls14-normalized	?	?	?	?	?	?	?	?	?	3700	3700
23_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
20_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
par8-3	0	0	0	350	0	0	350	0	0	0.93	0.30
par16-2-c	0.464930	0.463930	0.001000	349	0	0	349	0	0	1.30	0.67
par8-1-c	0	0	0	64	0	0	64	0	0	0.86	0.19
par16-4-c	0.139979	0.139979	0	324	0	0	324	0	0	1.07	0.39
par16-2	0.430935	0.430935	0	1015	0	0	1015	0	0	1.28	0.67
par16-3-c	0.296954	0.296954	0	334	0	0	334	0	0	1.19	0.66
par8-2	0.001000	0.001000	0	350	0	0	350	0	0	0.95	0.21
par8-4-c	0	0	0	67	0	0	67	0	0	0.86	0.25
par8-2-c	0	0	0	68	0	0	68	0	0	0.91	0.21
par16-1-c	0.307953	0.306954	0.000999	317	0	0	317	0	0	1.18	0.51
par8-4	0.001000	0.001000	0	350	0	0	350	0	0	0.89	0.29
par16-4	0.128981	0.128981	0	1015	0	0	1015	0	0	1.07	0.34
par8-5	0	0	0	350	0	0	350	0	0	0.87	0.20
par8-5-c	0	0	0	75	0	0	75	0	0	0.90	0.20
par16-1	0.406938	0.405938	0.001000	1015	0	0	1015	0	0	1.35	0.62
par16-3	0.397940	0.397940	0	1015	0	0	1015	0	0	1.26	0.76
par8-3-c	0	0	0	75	0	0	75	0	0	0.89	0.21
par16-5-c	0.240964	0.240964	0	341	0	0	341	0	0	0.83	0.45
par8-1	0	0	0	350	0	0	350	0	0	0.69	0.20
par16-5	0.351947	0.351947	0	1015	0	0	1015	0	0	0.41	0.57
fphp-015-020	?	?	?	?	?	?	?	?	?	3700	3700
fphp-010-020	?	?	?	?	?	?	?	?	?	3700	139.45
ais12	78.568055	78.499066	0.068989	12	4008	12866	126	139	12	1271.02	3700
ais10	1.334797	1.305801	0.028996	10	2207	7007	87	94	10	18.01	27.24
ais6	0.010998	0.004999	0.005999	8	343	1021	49	12	6	0.88	0.27
ais8	0.266959	0.245962	0.020997	11	979	3043	78	35	8	1.23	1.11
lang12	1.028844	0.891865	0.136979	192	4795	11925	424	152	12	1997.30	3700
lang28	?	?	?	?	?	?	?	?	?	3700	3700
lang23	?	?	?	?	?	?	?	?	?	3700	3700
lang20	?	?	?	?	?	?	?	?	?	3700	3700
lang16	?	?	?	?	?	?	?	?	?	3700	3700
lang15	?	?	?	?	?	?	?	?	?	3700	3700
lang24	?	?	?	?	?	?	?	?	?	3700	3700
lang27	?	?	?	?	?	?	?	?	?	3700	3700
lang19	?	?	?	?	?	?	?	?	?	3700	3700
bw_large.a	0	0	0	459	0	0	459	0	0	0.87	0.34
log-2	0.518921	0.383942	0.134979	910	3096	7852	1078	259	373	1.56	0.67
prob005.pddl	1.948704	1.711740	0.236964	1510	8873	20115	1777	924	534	35.89	8.94
tire-1	0.006998	0.006998	0	270	181	463	281	71	104	0.81	0.28
bw_large.c	0.046993	0.039994	0.006999	3013	1	2	3013	3	55	0.88	0.43
huge	0.001000	0	0.001000	459	0	0	459	0	0	1.01	0.08
logistics.b	0.088987	0.076989	0.011998	542	1275	3886	603	240	137	3.08	0.97
logistics.c	0.194971	0.168975	0.025996	721	2347	7046	827	314	164	741.66	26.48
hanoi5	0.425935	0.423936	0.001999	1931	0	0	1931	0	0	1.25	0.66
anomaly	0	0	0	48	0	0	48	0	0	0.83	0.16
tire-3	0.013997	0.013997	0	433	318	700	435	142	68	0.89	0.26
bomb_b10_t10_p_t20	29.706484	28.956598	0.749886	10020	0	0	10020	8460	9600	30.61	27.90
emptyroom_d4_g2_p_t6	0.007998	0.005999	0.001999	174	204	737	192	32	174	0.75	0.35
emptyroom_d12_g6_p_t8	0.102985	0.069990	0.032995	758	1284	4272	891	61	758	2.49	0.71
safe_safe_10_p_t5	0.005999	0.001999	0.004000	106	36	72	106	60	106	0.80	0.12
safe_safe_30_p_t8	0.120981	0.038994	0.081987	489	406	812	489	270	489	1.00	0.22
comm_p01_p_t8	0.156976	0.115982	0.040994	921	480	960	921	297	856	0.92	0.42
coins_p04_p_t8	0.216967	0.204969	0.011998	881	872	1910	905	471	716	1.01	0.51

	B+E($\sum$, 1000)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
binsearch.16.pp	0.013997	0.007998	0.005999	219	0	0	219	32	137	0.17	0.29
binsearch.16	0.258961	0.193971	0.064990	1725	16	96	1725	278	1288	0.52	0.53
mixdup	0.008998	0.008998	0	148	0	0	148	161	16	0.34	0.34
binsearch.32	0.992849	0.727889	0.264960	4082	32	224	4082	391	2830	1.46	1.44
binsearch.32.pp	0.013997	0.007998	0.005999	219	0	0	219	32	137	0.36	0.28
10random	0.029995	0.016997	0.012998	458	0	0	458	129	350	0.43	0.34
sum.32	0.036994	0.035994	0.001000	510	0	0	510	129	378	0.54	0.36
5_140_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
5_100_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
qg2-08	1.741735	1.630752	0.110983	511	0	0	511	1	83	2.50	1.95
qg5-11	0.463930	0.015998	0.447932	972	1277	3272	1327	4	41	1.11	0.63
qg3-08	0.067990	0.052992	0.014998	267	1400	3395	504	8	0	0.88	0.31
ls15-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls9-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg7-09	0.229965	0.012998	0.216967	586	382	990	726	3	81	0.98	1.23
ls16-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls10-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls12-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg6-09	0.100985	0.003999	0.096986	726	3	6	726	3	221	0.78	1.01
ls13-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls11-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls8-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg4-09	22.413593	22.341604	0.071989	315	4037	9630	662	67	12	35.95	36.32
qg1-08	5.363185	5.254201	0.108984	302	3876	13093	503	9	0	6.27	16.99
qg1-07	0.064991	0.019997	0.044994	189	1093	2798	337	6	0	0.28	0.65
qg2-07	0.101985	0.030996	0.070989	169	2384	7240	333	10	0	0.54	0.36
qg7-13	22.280613	21.898671	0.381942	1141	15964	38720	2153	44	0	34.21	26.30
ls14-normalized	?	?	?	?	?	?	?	?	?	3700	3700
23_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
20_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
par8-3	0	0	0	350	0	0	350	0	0	0.66	0.16
par16-2-c	0.165974	0.165974	0	349	0	0	349	0	0	0.95	0.34
par8-1-c	0	0	0	64	0	0	64	0	0	0.68	0.15
par16-4-c	0.047992	0.047992	0	324	0	0	324	0	0	0.86	0.33
par16-2	0.145978	0.145978	0	1015	0	0	1015	0	0	0.89	0.32
par16-3-c	0.104984	0.104984	0	334	0	0	334	0	0	0.83	0.23
par8-2	0	0	0	350	0	0	350	0	0	0.72	0.17
par8-4-c	0	0	0	67	0	0	67	0	0	0.85	0.13
par8-2-c	0	0	0	68	0	0	68	0	0	0.76	0.17
par16-1-c	0.105983	0.104984	0.000999	317	0	0	317	0	0	0.86	0.24
par8-4	0	0	0	350	0	0	350	0	0	0.75	0.30
par16-4	0.043994	0.043994	0	1015	0	0	1015	0	0	0.93	0.24
par8-5	0	0	0	350	0	0	350	0	0	0.67	0.14
par8-5-c	0	0	0	75	0	0	75	0	0	0.73	0.20
par16-1	0.136980	0.136980	0	1015	0	0	1015	0	0	0.93	0.32
par16-3	0.395940	0.395940	0	1015	0	0	1015	0	0	1.32	0.37
par8-3-c	0	0	0	75	0	0	75	0	0	0.09	0.21
par16-5-c	0.248963	0.247963	0.001000	341	0	0	341	0	0	0.75	0.25
par8-1	0	0	0	350	0	0	350	0	0	0.51	0.13
par16-5	0.342948	0.342948	0	1015	0	0	1015	0	0	1.28	0.35
fphp-015-020	?	?	?	?	?	?	?	?	?	3700	3700
fphp-010-020	?	?	?	?	?	?	?	?	?	3700	139.01
ais12	119.236873	119.171883	0.064990	12	4017	12873	127	138	12	1424.69	3700
ais10	9.917492	9.883497	0.033995	10	2204	7041	102	79	10	25.79	16.96
ais6	0.008998	0.004999	0.003999	8	343	1021	49	12	6	0.66	0.20
ais8	0.378942	0.350946	0.027996	11	976	3036	96	17	8	1.37	0.59
lang12	11.815204	11.657228	0.157976	192	4792	11915	435	141	12	1996.11	3700
lang28	?	?	?	?	?	?	?	?	?	3700	3700
lang23	?	?	?	?	?	?	?	?	?	3700	3700
lang20	?	?	?	?	?	?	?	?	?	3700	3700
lang16	?	?	?	?	?	?	?	?	?	3700	3700
lang15	?	?	?	?	?	?	?	?	?	3700	3700
lang24	?	?	?	?	?	?	?	?	?	3700	3700
lang27	?	?	?	?	?	?	?	?	?	3700	3700
lang19	?	?	?	?	?	?	?	?	?	3700	3700
bw_large.a	0.000999	0	0.000999	459	0	0	459	0	0	1.00	0.22
log-2	0.520921	0.384942	0.135979	910	3096	7852	1078	259	373	1.35	0.82
prob005.pddl	1.926707	1.677745	0.248962	1508	9501	21456	1771	930	532	52.64	9.14
tire-1	0.006998	0.006998	0	270	181	463	281	71	104	0.84	0.23
bw_large.c	0.046993	0.040994	0.005999	3013	1	2	3013	3	55	0.76	0.22
huge	0.001000	0	0.001000	459	0	0	459	0	0	0.89	0.28
logistics.b	0.090987	0.076989	0.013998	542	1275	3886	603	240	137	3.68	1.02
logistics.c	0.191971	0.166975	0.024996	721	2347	7046	827	314	164	742.26	26.57
hanoi5	0.425935	0.424936	0.000999	1931	0	0	1931	0	0	1.20	0.69
anomaly	0	0	0	48	0	0	48	0	0	0.76	0.24
tire-3	0.015997	0.014997	0.001000	433	318	700	435	142	68	0.81	0.23
bomb_b10_t10_p_t20	28.630647	27.908757	0.721890	10020	0	0	10020	8460	9600	29.36	27.93
emptyroom_d4_g2_p_t6	0.009998	0.005999	0.003999	174	204	737	192	32	174	0.66	0.22
emptyroom_d12_g6_p_t8	0.104984	0.069989	0.034995	780	1166	3854	898	54	780	1.09	0.52
safe_safe_10_p_t5	0.005999	0.002999	0.003000	106	36	72	106	60	106	0.68	0.21
safe_safe_30_p_t8	0.133979	0.038994	0.094985	489	406	812	489	270	489	0.95	0.28
comm_p01_p_t8	0.154976	0.114982	0.039994	921	480	960	921	297	856	0.85	0.38
coins_p04_p_t8	0.216967	0.204969	0.011998	881	872	1910	905	471	716	0.89	0.48

	B+E($\sum$, ∞)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#output	#input	#forget	Cachet	SharpSAT
binsearch.16.pp	0.013997	0.007998	0.005999	219	0	0	219	32	137	0.87	0.50
binsearch.16	0.261961	0.195971	0.065990	1725	16	96	1725	278	1288	0.88	0.80
mixdup	0.008998	0.008998	0	148	0	0	148	161	16	0.69	0.59
binsearch.32	1.000848	0.731889	0.268959	4082	32	224	4082	391	2830	2.01	3.11
binsearch.32.pp	0.014997	0.008998	0.005999	219	0	0	219	32	137	0.08	0.21
10random	0.028995	0.016997	0.011998	458	0	0	458	129	350	0.17	0.81
sum.32	0.036994	0.034994	0.002000	510	0	0	510	129	378	0.24	0.83
5_140_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
5_100_sd_schur	?	?	?	?	?	?	?	?	?	3700	3700
qg2-08	1.746735	1.637751	0.108984	511	0	0	511	1	83	2.40	5.22
qg5-11	0.466929	0.014998	0.451931	972	1277	3272	1327	4	41	1.05	1.55
qg3-08	0.066990	0.053992	0.012998	267	1400	3395	504	8	0	0.81	0.49
ls15-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls9-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg7-09	0.080988	0.004000	0.076988	586	382	990	726	3	81	0.77	0.14
ls16-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls10-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls12-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg6-09	0.100985	0.004000	0.096985	726	3	6	726	3	221	0.74	0.31
ls13-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls11-normalized	?	?	?	?	?	?	?	?	?	3700	3700
ls8-normalized	?	?	?	?	?	?	?	?	?	3700	3700
qg4-09	98.958956	98.879968	0.078988	315	4037	9630	703	26	12	111.87	112.95
qg1-08	5.378183	5.266200	0.111983	302	3876	13093	503	9	0	5.85	5.72
qg1-07	0.063991	0.019997	0.043994	189	1093	2798	337	6	0	0.66	0.17
qg2-07	0.100985	0.029996	0.070989	169	2384	7240	333	10	0	0.95	0.23
qg7-13	21.455738	21.075796	0.379942	1141	15964	38720	2179	18	0	33.58	25.56
ls14-normalized	?	?	?	?	?	?	?	?	?	3700	3700
23_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
20_rd_r45	?	?	?	?	?	?	?	?	?	3700	3700
par8-3	0	0	0	350	0	0	350	0	0	0.53	0.17
par16-2-c	0.157975	0.156976	0.000999	349	0	0	349	0	0	0.82	0.30
par8-1-c	0	0	0	64	0	0	64	0	0	0.62	0.08
par16-4-c	0.047992	0.047992	0	324	0	0	324	0	0	0.79	0.32
par16-2	0.146978	0.146978	0	1015	0	0	1015	0	0	0.73	0.36
par16-3-c	0.100984	0.100984	0	334	0	0	334	0	0	0.96	0.16
par8-2	0	0	0	350	0	0	350	0	0	0.61	0.12
par8-4-c	0	0	0	67	0	0	67	0	0	0.73	0.18
par8-2-c	0	0	0	68	0	0	68	0	0	0.80	0.32
par16-1-c	0.109983	0.109983	0	317	0	0	317	0	0	0.68	0.50
par8-4	0	0	0	350	0	0	350	0	0	0.63	0.63
par16-4	0.133980	0.133980	0	1015	0	0	1015	0	0	0.86	0.15
par8-5	0	0	0	350	0	0	350	0	0	0.68	0.14
par8-5-c	0	0	0	75	0	0	75	0	0	0.74	0.19
par16-1	0.393940	0.393940	0	1015	0	0	1015	0	0	0.47	0.42
par16-3	0.138979	0.138979	0	1015	0	0	1015	0	0	0.23	0.46
par8-3-c	0	0	0	75	0	0	75	0	0	0.15	0.38
par16-5-c	0.084987	0.084987	0	341	0	0	341	0	0	0.46	0.54
par8-1	0	0	0	350	0	0	350	0	0	0.44	0.99
par16-5	0.353946	0.352947	0.000999	1015	0	0	1015	0	0	0.71	0.18
fphp-015-020	?	?	?	?	?	?	?	?	?	3700	3700
fphp-010-020	?	?	?	?	?	?	?	?	?	3700	139.67
ais12	?	?	?	?	?	?	?	?	?	3700	3700
ais10	51.970099	51.921106	0.048993	10	2188	6960	146	35	10	67.28	58.76
ais6	0.010998	0.004999	0.005999	8	343	1021	49	12	6	0.59	0.17
ais8	0.373943	0.345947	0.027996	11	974	3030	96	17	8	1.30	0.62
lang12	43.822338	43.674361	0.147977	192	4790	11908	442	134	12	1999.86	3700
lang28	?	?	?	?	?	?	?	?	?	3700	3700
lang23	?	?	?	?	?	?	?	?	?	3700	3700
lang20	?	?	?	?	?	?	?	?	?	3700	3700
lang16	?	?	?	?	?	?	?	?	?	3700	3700
lang15	?	?	?	?	?	?	?	?	?	3700	3700
lang24	?	?	?	?	?	?	?	?	?	3700	3700
lang27	?	?	?	?	?	?	?	?	?	3700	3700
lang19	?	?	?	?	?	?	?	?	?	3700	3700
bw_large.a	0	0	0	459	0	0	459	0	0	0.71	0.20
log-2	0.520921	0.383942	0.136979	910	3096	7852	1078	259	373	1.52	0.65
prob005.pddl	1.962702	1.714739	0.247963	1508	9501	21456	1771	930	532	52.63	8.79
tire-1	0.007998	0.006998	0.001000	270	181	463	281	71	104	0.77	0.07
bw_large.c	0.045993	0.040994	0.004999	3013	1	2	3013	3	55	0.96	0.12
huge	0.001000	0	0.001000	459	0	0	459	0	0	0.64	0.05
logistics.b	0.089987	0.075989	0.013998	542	1275	3886	603	240	137	3.78	0.89
logistics.c	0.198970	0.171974	0.026996	721	2347	7046	827	314	164	734.04	26.31
hanoi5	1.256809	1.252809	0.004000	1931	0	0	1931	0	0	1.90	0.58
anomaly	0	0	0	48	0	0	48	0	0	0.68	0.07
tire-3	0.043994	0.039994	0.004000	433	318	700	435	142	68	0.97	0.08
bomb_b10_t10_p_t20	79.802868	77.682191	2.120677	10020	0	0	10020	8460	9600	80.56	29.68
emptyroom_d4_g2_p_t6	0.009998	0.005999	0.003999	174	204	737	192	32	174	0.85	0.06
emptyroom_d12_g6_p_t8	0.114983	0.076989	0.037994	780	1166	3854	898	54	780	0.92	0.30
safe_safe_10_p_t5	0.006998	0.002999	0.003999	106	36	72	106	60	106	0.54	0.04
safe_safe_30_p_t8	0.119981	0.036994	0.082987	489	406	812	489	270	489	0.79	0.21
comm_p01_p_t8	0.153977	0.113983	0.039994	921	480	960	921	297	856	1.07	1.16
coins_p04_p_t8	0.214967	0.202969	0.011998	881	872	1910	905	471	716	0.74	0.30

Family	Benchmark Information			
	Name	#var	#cl	#lit
Planning	coins_p02_p_t6	1040	2821	7077
Planning	bomb_b5_t5_p_t5	1340	2610	6860
Planning	uts_k2_p_t6	631	2275	6124
Planning	blocks_right_6_p_t5	2790	25961	71187
Planning	bomb_b10_t10_p_t6	5600	11060	29660
Planning	ring_3_p_t8	392	1008	2500
Planning	flip_no_action_1_p_t8	57	152	400
Planning	ring2_r6_p_t5	308	957	2518
Planning	emptyroom_d8_g4_p_t8	624	2066	5488
Planning	coins_p04_p_t5	872	2353	5901
Planning	bomb_b10_t10_p_t16	14800	29460	79060
Planning	emptyroom_d16_g8_p_t10	1592	5702	15032
Planning	uts_k1_p_t5	164	499	1356
Planning	bomb_b10_t10_p_t13	12040	23940	64240
Planning	coins_p10_p_t5	1988	4959	12319
Planning	coins_p05_p_t8	1376	3757	9429
Planning	safe_safe_2_p_t10	166	331	815
Planning	bomb_b10_t10_p_t18	16640	33140	88940
Planning	sort_num_s_3_p_t6	189	594	1584
Planning	ring_3_p_t10	484	1256	3116
Planning	ring2_r8_p_t8	632	2029	5344
Planning	bomb_b5_t5_p_t8	2120	4170	10970
Planning	comm_p05_p_t6	4026	14709	38037
Planning	flip_1_p_t6	25	60	156
Planning	sort_num_s_4_p_t8	768	2884	7880
Planning	uts_k5_p_t10	5631	27806	71130
Planning	sort_num_s_7_p_t10	7049	30422	83944
Planning	ring_5_p_t8	632	1679	4166
Planning	sort_num_s_6_p_t5	2091	8715	24030
Planning	bomb_b10_t10_p_t15	13880	27620	74120
Planning	ring_4_p_t10	632	1673	4152
Planning	sort_num_s_5_p_t10	2175	8770	24140
Planning	uts_k5_p_t6	3427	16738	42754
Planning	coins_p01_p_t10	1712	4693	11781
Planning	comm_p04_p_t8	4041	14370	37282
Planning	comm_p03_p_t6	2228	7503	19503
Planning	blocks_right_3_p_t10	1589	8628	23876
Planning	uts_k3_p_t6	1315	5332	14094
Planning	coins_p05_p_t10	1712	4693	11781
Planning	sort_num_s_3_p_t10	309	986	2632
Planning	safe_safe_2_p_t5	86	171	420
Planning	bomb_b5_t1_p_t5	564	1086	2796
Planning	safe_safe_2_p_t8	134	267	657
Planning	emptyroom_d20_g10_corners_p_t8	1608	5524	14696
Planning	coins_p10_p_t8	3134	7911	19663
Planning	sort_num_s_7_p_t8	5649	24346	67172
Planning	ring2_r6_p_t6	366	1144	3012
Planning	coins_p01_p_t6	1040	2821	7077
Planning	sort_num_s_7_p_t6	4249	18270	50400
Planning	emptyroom_d16_g8_p_t6	968	3518	9224
Planning	coins_p03_p_t8	1376	3757	9429
Planning	ring_3_p_t6	300	760	1884
Planning	flip_1_p_t10	41	100	260
Planning	comm_p10_p_t10	17539	75516	191696
Planning	coins_p02_p_t8	1376	3757	9429
Planning	safe_safe_30_p_t6	577	1528	3624
Planning	blocks_right_3_p_t8	1275	6914	19128
Planning	ring_4_p_t5	332	848	2102
Planning	bomb_b10_t5_p_t10	5460	10815	28815
Planning	blocks_right_2_p_t8	643	3029	8623
Planning	blocks_right_5_p_t5	1996	14681	38626
Planning	flip_no_action_1_p_t6	43	114	300
Planning	bomb_b10_t10_p_t11	10200	20260	54360
Planning	uts_k4_p_t8	2969	13381	34776
Planning	coins_p02_p_t5	872	2353	5901
Planning	comm_p01_p_t10	1510	4569	11849
Planning	emptyroom_d16_g8_p_t8	1280	4610	12128
Planning	emptyroom_d16_g8_p_t5	812	2972	7772
Planning	bomb_b20_t5_p_t6	8500	16825	45325
Planning	emptyroom_d24_g12_p_t8	1936	7226	18912
Planning	blocks_right_4_p_t5	1334	8343	22385
Planning	comm_p05_p_t5	3384	12261	31701
Planning	blocks_right_4_p_t8	2117	13257	35573
Planning	comm_p02_p_t8	1995	6444	16764
Planning	blocks_right_3_p_t6	961	5200	14380
Planning	flip_1_p_t5	21	50	130
Planning	blocks_right_6_p_t10	5525	48741	128747
Planning	comm_p05_p_t10	6594	24501	63381
Planning	uts_k1_p_t8	257	796	2166
Planning	uts_k1_p_t10	319	994	2706
Planning	safe_safe_5_p_t8	134	267	657
Planning	sort_num_s_3_p_t8	249	790	2108
Planning	bomb_b5_t1_p_t6	672	1302	3354
Planning	emptyroom_d12_g6_p_t5	604	2144	5628

Benchmark Information	B+E($\sum$, 10)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
coins_p02_p_t6	0.125980	0.114982	0.010998	657	662	1492	680	360	532	0.44	0.50
bomb_b5_t5_p_t5	0.130980	0.124981	0.005999	760	0	0	760	580	700	0.48	0.50
uts_k2_p_t6	0.046992	0.029995	0.016997	439	744	2095	486	145	283	31.65	30.29
blocks_right_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t6	2.405635	2.337645	0.067990	3020	0	0	3020	2580	2880	3.38	2.83
ring_3_p_t8	0.013997	0.008998	0.004999	326	124	413	336	56	326	0.93	0.37
flip_no_action_1_p_t8	0.000999	0.000999	0	40	15	44	40	17	40	0.99	0.33
ring2_r6_p_t5	0.011998	0.007998	0.004000	249	207	700	267	41	249	0.97	0.34
emptyroom_d8_g4_p_t8	0.037994	0.025996	0.011998	491	719	2506	557	67	491	1.84	1.01
coins_p04_p_t5	0.086986	0.080987	0.005999	557	512	1106	569	303	452	1.09	0.42
bomb_b10_t10_p_t16	16.782449	16.313520	0.468929	8020	0	0	8020	6780	7680	17.82	17.81
emptyroom_d16_g8_p_t10	0.157976	0.108984	0.048992	1261	2332	7735	1456	136	1261	33.23	7.34
uts_k1_p_t5	0.001999	0.000999	0.001000	127	50	145	128	36	85	0.98	0.37
bomb_b10_t10_p_t13	11.398267	11.080315	0.317952	6520	0	0	6520	5520	6240	11.99	11.66
coins_p10_p_t5	0.488926	0.461930	0.026996	1077	1589	4016	1199	789	960	1.14	0.89
coins_p05_p_t8	0.216967	0.203969	0.012998	869	926	2119	904	472	704	1.58	3.92
safe_safe_2_p_t10	0.005999	0.001999	0.004000	111	6	12	111	55	111	0.71	0.47
bomb_b10_t10_p_t18	21.402746	20.811836	0.590910	9020	0	0	9020	7620	8640	22.23	22.21
sort_num_s_3_p_t6	0.007998	0.004999	0.002999	134	218	709	155	34	134	1.00	0.37
ring_3_p_t10	0.015997	0.011998	0.003999	401	198	670	420	64	401	1.00	0.35
ring2_r8_p_t8	0.034994	0.026995	0.007999	525	471	1586	564	68	525	1.51	1.09
bomb_b5_t5_p_t8	0.325950	0.311952	0.013998	1210	0	0	1210	910	1120	1.31	0.70
comm_p05_p_t6	1.612755	1.365793	0.246962	2025	9662	33551	2953	1073	1914	162.44	109.98
flip_1_p_t6	0	0	0	18	0	0	18	7	18	0.50	0.37
sort_num_s_4_p_t8	0.084987	0.042993	0.041994	614	1113	4071	652	116	614	3536.71	58.94
uts_k5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
sort_num_s_7_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
ring_5_p_t8	0.023996	0.018997	0.004999	532	297	1005	559	73	532	1.19	0.41
sort_num_s_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t15	14.697765	14.279829	0.417936	7520	0	0	7520	6360	7200	15.71	15.84
ring_4_p_t10	0.023996	0.018997	0.004999	530	301	1032	555	77	530	1.04	0.38
sort_num_s_5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k5_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p01_p_t10	0.340949	0.321951	0.018998	1069	1275	3062	1127	585	864	1.33	0.68
comm_p04_p_t8	1.628753	1.353794	0.274959	2104	9228	32642	2976	1065	1982	430.51	101.13
comm_p03_p_t6	0.515922	0.402939	0.112983	1207	4596	16525	1619	609	1126	16.47	24.95
blocks_right_3_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k3_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p05_p_t10	0.331949	0.314951	0.016998	1077	1232	2877	1128	584	872	1.27	0.67
sort_num_s_3_p_t10	0.015997	0.009998	0.005999	218	402	1314	255	54	218	0.95	0.53
safe_safe_2_p_t5	0.000999	0	0.000999	56	6	12	56	30	56	0.96	0.32
bomb_b5_t1_p_t5	0.023996	0.021996	0.002000	336	0	0	336	228	300	0.93	0.40
safe_safe_2_p_t8	0.003999	0.000999	0.003000	89	6	12	89	45	89	0.99	0.35
emptyroom_d20_g10_corners_p_t8	0.127981	0.096986	0.030995	1319	1900	6567	1484	124	1319	18.86	10.94
coins_p10_p_t8	1.153825	1.098833	0.054992	1768	2318	5617	1914	1220	1585	2.10	1.54
sort_num_s_7_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring2_r6_p_t6	0.014997	0.010998	0.003999	296	262	884	318	48	296	1.04	0.41
coins_p01_p_t6	0.124981	0.114983	0.009998	657	662	1492	680	360	532	1.14	0.52
sort_num_s_7_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
emptyroom_d16_g8_p_t6	0.083988	0.049993	0.033995	772	1406	4565	882	86	772	1.33	0.64
coins_p03_p_t8	0.224965	0.210967	0.013998	869	926	2119	904	472	704	1.58	3.83
ring_3_p_t6	0.007998	0.004999	0.002999	247	85	282	256	44	247	0.91	0.37
flip_1_p_t10	0.000999	0	0.000999	30	0	0	30	11	30	1.00	0.48
comm_p10_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t8	0.214968	0.204969	0.009999	881	872	1910	905	471	716	1.17	0.62
safe_safe_30_p_t6	0.164974	0.023996	0.140978	105	1298	3780	366	211	105	1.08	0.52
blocks_right_3_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring_4_p_t5	0.026996	0.018997	0.007999	272	124	408	283	49	272	1.03	0.36
bomb_b10_t5_p_t10	6.539006	6.329038	0.209968	3015	0	0	3015	2445	2850	7.52	2.65
blocks_right_2_p_t8	0.159976	0.088987	0.070989	455	1318	4246	513	130	295	8.92	2.71
blocks_right_5_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
flip_no_action_1_p_t6	0.000999	0	0.000999	30	11	32	30	13	30	0.99	0.33
bomb_b10_t10_p_t11	8.059775	7.834809	0.224966	5520	0	0	5520	4680	5280	9.04	8.63
uts_k4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t5	0.087986	0.080987	0.006999	557	512	1106	569	303	452	1.09	0.44
comm_p01_p_t10	0.235964	0.173974	0.061990	927	2386	8923	1095	415	848	3.57	2.90
emptyroom_d16_g8_p_t8	0.111982	0.076988	0.034994	1021	1838	6021	1177	103	1021	3.89	1.28
emptyroom_d16_g8_p_t5	0.061990	0.035994	0.025996	665	1091	3513	748	64	665	1.06	0.43
bomb_b20_t5_p_t6	5.649141	5.502164	0.146977	4525	0	0	4525	3975	4350	6.55	6.18
emptyroom_d24_g12_p_t8	0.232965	0.142979	0.089986	1559	3009	9663	1786	150	1559	7.68	4.19
blocks_right_4_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t5	1.169823	0.979851	0.189972	1719	7872	27126	2476	908	1623	45.53	35.14
blocks_right_4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
comm_p02_p_t8	0.412937	0.314952	0.097985	1149	3681	13421	1455	540	1065	12.70	24.20
blocks_right_3_p_t6	0.139979	0.066990	0.072989	568	3218	10177	764	197	388	281.80	39.03
flip_1_p_t5	0	0	0	15	0	0	15	6	15	0.35	0.49
blocks_right_6_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k1_p_t8	0.005999	0.004999	0.001000	193	87	230	203	54	127	0.98	0.30
uts_k1_p_t10	0.008998	0.007998	0.001000	239	112	291	253	66	157	0.96	0.35
safe_safe_5_p_t8	0.002999	0.000999	0.002000	89	6	12	89	45	89	0.94	0.31
sort_num_s_3_p_t8	0.011998	0.006998	0.005000	178	298	975	208	41	178	0.97	0.38
bomb_b5_t1_p_t6	0.030995	0.028995	0.002000	402	0	0	402	270	360	0.93	0.42
emptyroom_d12_g6_p_t5	0.038994	0.022996	0.015998	486	779	2557	551	53	486	1.07	0.51

Benchmark Information	B+E($\sum$, 100)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
coins_p02_p_t6	0.123982	0.115983	0.007999	665	632	1374	681	359	540	0.94	0.42
bomb_b5_t5_p_t5	0.136979	0.130980	0.005999	760	0	0	760	580	700	0.96	0.40
uts_k2_p_t6	0.047992	0.032994	0.014998	468	586	1533	498	133	312	26.91	11.77
blocks_right_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t6	2.417633	2.349643	0.067990	3020	0	0	3020	2580	2880	3.30	2.78
ring_3_p_t8	0.013997	0.008998	0.004999	328	113	379	340	52	328	0.87	0.42
flip_no_action_1_p_t8	0	0	0	40	15	44	40	17	40	0.78	0.29
ring2_r6_p_t5	0.012998	0.008998	0.004000	252	189	610	271	37	252	0.83	0.28
emptyroom_d8_g4_p_t8	0.046992	0.031995	0.014997	504	659	2315	571	53	504	1.20	0.68
coins_p04_p_t5	0.089986	0.083987	0.005999	557	512	1106	569	303	452	0.93	0.11
bomb_b10_t10_p_t16	16.929426	16.461497	0.467929	8020	0	0	8020	6780	7680	17.81	17.29
emptyroom_d16_g8_p_t10	0.248963	0.188972	0.059991	1264	2324	7722	1492	100	1264	33.13	6.71
uts_k1_p_t5	0.002999	0.002999	0	127	50	145	128	36	85	0.85	0.09
bomb_b10_t10_p_t13	11.551244	11.232292	0.318952	6520	0	0	6520	5520	6240	12.43	11.43
coins_p10_p_t5	0.480927	0.458931	0.021996	1191	1045	2171	1203	785	1074	1.34	0.58
coins_p05_p_t8	0.215968	0.203969	0.011999	881	872	1910	905	471	716	1.08	0.50
safe_safe_2_p_t10	0.004999	0.000999	0.004000	111	6	12	111	55	111	0.84	0.24
bomb_b10_t10_p_t18	21.844679	21.256768	0.587911	9020	0	0	9020	7620	8640	22.74	22.18
sort_num_s_3_p_t6	0.004999	0.004999	0	162	12	24	162	27	162	0.80	0.96
ring_3_p_t10	0.019996	0.012998	0.006998	403	189	642	424	60	403	0.84	0.10
ring2_r8_p_t8	0.048992	0.039993	0.008999	524	477	1600	572	60	524	1.39	0.37
bomb_b5_t5_p_t8	0.324951	0.311953	0.012998	1210	0	0	1210	910	1120	1.17	0.57
comm_p05_p_t6	1.591758	1.392788	0.198970	3081	3240	6480	3081	945	2970	2.45	1.89
flip_1_p_t6	0	0	0	18	0	0	18	7	18	0.82	0.34
sort_num_s_4_p_t8	?	?	?	?	?	?	?	?	?	3700	76.51
uts_k5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
sort_num_s_7_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
ring_5_p_t8	0.026996	0.021997	0.004999	534	285	961	565	67	534	0.92	0.36
sort_num_s_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t15	14.802749	14.386813	0.415936	7520	0	0	7520	6360	7200	15.62	14.98
ring_4_p_t10	0.028995	0.022996	0.005999	530	301	1032	557	75	530	0.94	0.32
sort_num_s_5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k5_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p01_p_t10	1.018845	0.972852	0.045993	1097	1112	2446	1129	583	892	1.91	0.57
comm_p04_p_t8	4.733280	4.013389	0.719891	3114	2880	5760	3114	927	2992	5.63	1.77
comm_p03_p_t6	1.464777	1.209816	0.254961	1695	1344	2688	1695	533	1614	2.32	0.80
blocks_right_3_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k3_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p05_p_t10	0.334949	0.319952	0.014997	1097	1112	2446	1129	583	892	1.16	1.34
sort_num_s_3_p_t10	0.020996	0.013997	0.006999	227	341	1116	269	40	227	0.87	0.50
safe_safe_2_p_t5	0.000999	0	0.000999	56	6	12	56	30	56	0.79	0.14
bomb_b5_t1_p_t5	0.022996	0.020996	0.002000	336	0	0	336	228	300	0.87	0.52
safe_safe_2_p_t8	0.003999	0.000999	0.003000	89	6	12	89	45	89	0.82	0.31
emptyroom_d20_g10_corners_p_t8	0.208969	0.126981	0.081988	1372	1605	5498	1533	75	1372	11.72	30.25
coins_p10_p_t8	1.143826	1.102833	0.040993	1893	1716	3598	1917	1217	1710	1.97	3.72
sort_num_s_7_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring2_r6_p_t6	0.016997	0.011998	0.004999	300	238	780	325	41	300	0.88	0.37
coins_p01_p_t6	0.122982	0.115983	0.006999	665	632	1374	681	359	540	0.98	0.40
sort_num_s_7_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
emptyroom_d16_g8_p_t6	0.092986	0.051992	0.040994	820	1142	3621	914	54	820	0.95	0.62
coins_p03_p_t8	0.223966	0.211968	0.011998	881	872	1910	905	471	716	1.05	0.70
ring_3_p_t6	0.009998	0.005999	0.003999	247	85	282	256	44	247	0.83	0.06
flip_1_p_t10	0	0	0	30	0	0	30	11	30	0.83	0.13
comm_p10_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t8	0.213967	0.202969	0.010998	881	872	1910	905	471	716	0.75	1.00
safe_safe_30_p_t6	0.071989	0.022997	0.048992	367	406	812	367	210	367	0.67	0.54
blocks_right_3_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring_4_p_t5	0.009998	0.007998	0.002000	269	142	476	282	50	269	0.97	0.07
bomb_b10_t5_p_t10	2.311649	2.235660	0.075989	3015	0	0	3015	2445	2850	3.09	2.57
blocks_right_2_p_t8	0.075988	0.046992	0.028996	465	1220	3868	531	112	305	2.35	1.33
blocks_right_5_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
flip_no_action_1_p_t6	0	0	0	30	11	32	30	13	30	0.89	0.30
bomb_b10_t10_p_t11	8.013782	7.789816	0.223966	5520	0	0	5520	4680	5280	9.00	8.42
uts_k4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t5	0.087986	0.080987	0.006999	557	512	1106	569	303	452	0.92	0.36
comm_p01_p_t10	0.236964	0.175974	0.060990	1149	600	1200	1149	361	1070	1.10	0.31
emptyroom_d16_g8_p_t8	0.178973	0.115983	0.062990	1027	1816	5973	1206	74	1027	4.00	1.73
emptyroom_d16_g8_p_t5	0.069989	0.036994	0.032995	700	896	2775	762	50	700	0.91	0.33
bomb_b20_t5_p_t6	5.635143	5.491165	0.143978	4525	0	0	4525	3975	4350	6.47	5.99
emptyroom_d24_g12_p_t8	0.335948	0.239963	0.095985	1552	3058	9882	1833	103	1552	7.19	5.73
blocks_right_4_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t5	1.134828	0.993849	0.140979	2571	2700	5400	2571	813	2475	1.92	1.44
blocks_right_4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
comm_p02_p_t8	0.414937	0.322951	0.091986	1524	1008	2016	1524	471	1440	0.54	0.62
blocks_right_3_p_t6	0.193971	0.096986	0.096985	587	3040	9440	792	169	407	226.94	38.13
flip_1_p_t5	0	0	0	15	0	0	15	6	15	0.75	0.09
blocks_right_6_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k1_p_t8	0.018997	0.014998	0.003999	193	87	230	203	54	127	0.93	0.24
uts_k1_p_t10	0.027996	0.023997	0.003999	239	112	291	253	66	157	0.94	0.23
safe_safe_5_p_t8	0.012998	0.003999	0.008999	89	6	12	89	45	89	0.90	0.24
sort_num_s_3_p_t8	0.037994	0.024996	0.012998	185	249	817	215	34	185	0.97	0.31
bomb_b5_t1_p_t6	0.091986	0.084987	0.006999	402	0	0	402	270	360	0.96	0.43
emptyroom_d12_g6_p_t5	0.121982	0.068990	0.052992	516	620	1991	562	42	516	1.01	0.33

Benchmark Information	B+E($\sum$, 1000)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
coins_p02_p_t6	0.122982	0.114983	0.007999	665	632	1374	681	359	540	0.79	0.29
bomb_b5_t5_p_t5	0.132980	0.125981	0.006999	760	0	0	760	580	700	0.78	0.37
uts_k2_p_t6	0.045993	0.031995	0.013998	470	575	1501	499	132	314	30.09	3.93
blocks_right_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t6	2.410634	2.347643	0.062991	3020	0	0	3020	2580	2880	3.17	2.75
ring_3_p_t8	0.013997	0.008998	0.004999	328	113	379	340	52	328	0.73	0.27
flip_no_action_1_p_t8	0.000999	0	0.000999	40	15	44	40	17	40	0.86	0.16
ring2_r6_p_t5	0.010998	0.007998	0.003000	252	189	610	271	37	252	0.75	0.27
emptyroom_d8_g4_p_t8	0.044993	0.031995	0.012998	508	642	2265	572	52	508	1.07	0.35
coins_p04_p_t5	0.086987	0.080988	0.005999	557	512	1106	569	303	452	0.84	0.31
bomb_b10_t10_p_t16	16.644470	16.180540	0.463930	8020	0	0	8020	6780	7680	17.43	17.34
emptyroom_d16_g8_p_t10	0.364944	0.285956	0.078988	1300	2126	6995	1522	70	1300	5.44	7.08
uts_k1_p_t5	0.002999	0.001999	0.001000	127	50	145	128	36	85	0.72	0.22
bomb_b10_t10_p_t13	10.972332	10.662379	0.309953	6520	0	0	6520	5520	6240	11.85	32.89
coins_p10_p_t5	0.476928	0.454931	0.021997	1191	1045	2171	1203	785	1074	1.23	0.79
coins_p05_p_t8	0.215968	0.203969	0.011999	881	872	1910	905	471	716	0.96	0.43
safe_safe_2_p_t10	0.004999	0.000999	0.004000	111	6	12	111	55	111	0.73	0.23
bomb_b10_t10_p_t18	21.816683	21.227772	0.588911	9020	0	0	9020	7620	8640	22.74	22.06
sort_num_s_3_p_t6	0.006998	0.004999	0.001999	162	12	24	162	27	162	0.69	0.20
ring_3_p_t10	0.017997	0.012998	0.004999	403	189	642	424	60	403	0.84	0.26
ring2_r8_p_t8	0.048992	0.039993	0.008999	528	453	1504	577	55	528	0.93	0.46
bomb_b5_t5_p_t8	0.326951	0.311953	0.014998	1210	0	0	1210	910	1120	1.02	0.57
comm_p05_p_t6	1.596757	1.393788	0.202969	3081	3240	6480	3081	945	2970	2.28	5.59
flip_1_p_t6	0	0	0	18	0	0	18	7	18	0.65	0.89
sort_num_s_4_p_t8	0.384942	0.320952	0.063990	615	1085	3928	696	72	615	2273.39	74.93
uts_k5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
sort_num_s_7_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
ring_5_p_t8	0.027995	0.022996	0.004999	535	279	931	566	66	535	1.00	0.26
sort_num_s_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t15	15.353666	14.939729	0.413937	7520	0	0	7520	6360	7200	16.24	15.20
ring_4_p_t10	0.029995	0.023996	0.005999	529	307	1046	557	75	529	0.82	0.28
sort_num_s_5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k5_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p01_p_t10	0.336949	0.321951	0.014998	1097	1112	2446	1129	583	892	1.00	0.58
comm_p04_p_t8	1.606756	1.361793	0.244963	3114	2880	5760	3114	927	2992	2.38	1.87
comm_p03_p_t6	0.493925	0.411938	0.081987	1695	1344	2688	1695	533	1614	1.22	0.74
blocks_right_3_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k3_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p05_p_t10	0.335948	0.319951	0.015997	1097	1112	2446	1129	583	892	0.99	0.54
sort_num_s_3_p_t10	0.015997	0.013997	0.002000	270	20	40	270	39	270	0.75	0.17
safe_safe_2_p_t5	0.000999	0	0.000999	56	6	12	56	30	56	0.88	0.21
bomb_b5_t1_p_t5	0.023996	0.021996	0.002000	336	0	0	336	228	300	0.69	0.29
safe_safe_2_p_t8	0.002999	0.000999	0.002000	89	6	12	89	45	89	0.82	0.21
emptyroom_d20_g10_corners_p_t8	0.184972	0.120982	0.063990	1376	1588	5443	1534	74	1376	11.43	10.16
coins_p10_p_t8	1.147826	1.106832	0.040994	1893	1716	3598	1917	1217	1710	1.87	1.29
sort_num_s_7_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring2_r6_p_t6	0.014997	0.011998	0.002999	300	238	780	325	41	300	0.90	0.24
coins_p01_p_t6	0.122982	0.114983	0.007999	665	632	1374	681	359	540	0.88	0.35
sort_num_s_7_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
emptyroom_d16_g8_p_t6	0.091986	0.049993	0.041993	820	1142	3621	914	54	820	0.78	0.34
coins_p03_p_t8	0.214968	0.203969	0.010999	881	872	1910	905	471	716	1.14	0.44
ring_3_p_t6	0.008998	0.005999	0.002999	247	85	282	256	44	247	0.68	0.22
flip_1_p_t10	0	0	0	30	0	0	30	11	30	0.81	0.25
comm_p10_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t8	0.214967	0.202969	0.011998	881	872	1910	905	471	716	0.88	0.87
safe_safe_30_p_t6	0.074988	0.024996	0.049992	367	406	812	367	210	367	0.82	0.48
blocks_right_3_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring_4_p_t5	0.010998	0.007998	0.003000	269	142	476	282	50	269	0.69	0.17
bomb_b10_t5_p_t10	2.233661	2.160672	0.072989	3015	0	0	3015	2445	2850	3.06	2.52
blocks_right_2_p_t8	0.152976	0.121981	0.030995	466	1212	3857	540	103	306	2.16	1.58
blocks_right_5_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
flip_no_action_1_p_t6	0	0	0	30	11	32	30	13	30	0.66	0.16
bomb_b10_t10_p_t11	7.996784	7.771819	0.224965	5520	0	0	5520	4680	5280	8.75	8.34
uts_k4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t5	0.090987	0.083988	0.006999	557	512	1106	569	303	452	0.27	0.28
comm_p01_p_t10	0.242963	0.179973	0.062990	1149	600	1200	1149	361	1070	0.48	0.40
emptyroom_d16_g8_p_t8	0.176973	0.115983	0.060990	1060	1634	5308	1218	62	1060	0.92	0.56
emptyroom_d16_g8_p_t5	0.070989	0.036994	0.033995	700	896	2775	762	50	700	0.69	0.28
bomb_b20_t5_p_t6	5.655140	5.509163	0.145977	4525	0	0	4525	3975	4350	5.71	5.91
emptyroom_d24_g12_p_t8	0.362945	0.222966	0.139979	1620	2666	8415	1858	78	1620	1.70	1.01
blocks_right_4_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t5	1.125829	0.985850	0.139979	2571	2700	5400	2571	813	2475	1.84	1.35
blocks_right_4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
comm_p02_p_t8	0.417937	0.322951	0.094986	1524	1008	2016	1524	471	1440	1.39	0.63
blocks_right_3_p_t6	0.383942	0.278958	0.104984	587	3040	9428	800	161	407	218.22	32.52
flip_1_p_t5	0	0	0	15	0	0	15	6	15	0.74	0.30
blocks_right_6_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t10	4.358338	3.776426	0.581912	5121	5400	10800	5121	1473	4950	5.08	4.45
uts_k1_p_t8	0.004999	0.003999	0.001000	193	87	230	203	54	127	0.79	0.13
uts_k1_p_t10	0.008998	0.007998	0.001000	239	112	291	253	66	157	0.66	0.18
safe_safe_5_p_t8	0.003999	0.000999	0.003000	89	6	12	89	45	89	0.79	0.20
sort_num_s_3_p_t8	0.010998	0.007998	0.003000	216	16	32	216	33	216	0.66	0.20
bomb_b5_t1_p_t6	0.029995	0.028995	0.001000	402	0	0	402	270	360	0.82	0.27
emptyroom_d12_g6_p_t5	0.040993	0.022996	0.017997	516	620	1991	562	42	516	0.70	0.25

Benchmark Information	B+E($\sum$, ∞)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#output	#input	#forget	Cachet	SharpSAT
coins_p02_p_t6	0.123982	0.115983	0.007999	665	632	1374	681	359	540	0.99	0.19
bomb_b5_t5_p_t5	0.131979	0.125980	0.005999	760	0	0	760	580	700	0.71	0.29
uts_k2_p_t6	0.045993	0.031995	0.013998	470	575	1501	499	132	314	29.95	3.76
blocks_right_6_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
bomb_b10_t10_p_t6	2.490622	2.423632	0.066990	3020	0	0	3020	2580	2880	3.03	2.45
ring_3_p_t8	0.013997	0.008998	0.004999	328	113	379	340	52	328	0.57	0.06
flip_no_action_1_p_t8	0	0	0	40	15	44	40	17	40	0.70	0.06
ring2_r6_p_t5	0.012998	0.008998	0.004000	252	189	610	271	37	252	0.84	0.14
emptyroom_d8_g4_p_t8	0.042993	0.031995	0.010998	508	642	2267	572	52	508	0.72	0.25
coins_p04_p_t5	0.087986	0.081987	0.005999	557	512	1106	569	303	452	0.94	0.14
bomb_b10_t10_p_t16	16.735456	16.267527	0.467929	8020	0	0	8020	6780	7680	17.35	18.14
emptyroom_d16_g8_p_t10	0.338949	0.258961	0.079988	1300	2126	6995	1522	70	1300	5.32	2.37
uts_k1_p_t5	0.003000	0.002000	0.001000	127	50	145	128	36	85	0.61	0.06
bomb_b10_t10_p_t13	11.176301	10.867348	0.308953	6520	0	0	6520	5520	6240	11.95	11.32
coins_p10_p_t5	0.480927	0.458931	0.021996	1191	1045	2171	1203	785	1074	1.08	0.55
coins_p05_p_t8	0.216967	0.204968	0.011999	881	872	1910	905	471	716	0.75	0.28
safe_safe_2_p_t10	0.005999	0.001999	0.004000	111	6	12	111	55	111	0.88	0.03
bomb_b10_t10_p_t18	21.314760	20.723850	0.590910	9020	0	0	9020	7620	8640	21.95	22.03
sort_num_s_3_p_t6	0.006998	0.004999	0.001999	162	12	24	162	27	162	0.58	0.61
ring_3_p_t10	0.019996	0.013997	0.005999	403	189	642	424	60	403	0.73	0.08
ring2_r8_p_t8	0.048992	0.040993	0.007999	528	453	1504	577	55	528	1.07	0.19
bomb_b5_t5_p_t8	0.325951	0.310953	0.014998	1210	0	0	1210	910	1120	0.89	0.88
comm_p05_p_t6	1.584759	1.386789	0.197970	3081	3240	6480	3081	945	2970	2.21	1.69
flip_1_p_t6	0	0	0	18	0	0	18	7	18	0.52	0.08
sort_num_s_4_p_t8	1.005847	0.946856	0.058991	633	934	3420	704	64	633	266.89	42.03
uts_k5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
sort_num_s_7_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
ring_5_p_t8	0.028995	0.022996	0.005999	535	279	931	566	66	535	0.63	0.10
sort_num_s_6_p_t5	1.096833	0.777882	0.318951	1980	525	1050	1980	111	1980	1.86	1.16
bomb_b10_t10_p_t15	14.783752	14.377814	0.405938	7520	0	0	7520	6360	7200	15.41	14.96
ring_4_p_t10	0.027995	0.023996	0.003999	529	307	1046	557	75	529	0.90	0.12
sort_num_s_5_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k5_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p01_p_t10	0.338949	0.322951	0.015998	1097	1112	2446	1129	583	892	0.42	0.38
comm_p04_p_t8	1.608755	1.370792	0.237963	3114	2880	5760	3114	927	2992	2.19	1.80
comm_p03_p_t6	0.496925	0.410938	0.085987	1695	1344	2688	1695	533	1614	1.09	1.46
blocks_right_3_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
uts_k3_p_t6	?	?	?	?	?	?	?	?	?	3700	3700
coins_p05_p_t10	0.333950	0.318952	0.014998	1097	1112	2446	1129	583	892	1.02	0.40
sort_num_s_3_p_t10	0.017997	0.014997	0.003000	270	20	40	270	39	270	0.62	0.04
safe_safe_2_p_t5	0.000999	0	0.000999	56	6	12	56	30	56	0.76	0.03
bomb_b5_t1_p_t5	0.021996	0.020996	0.001000	336	0	0	336	228	300	0.91	0.11
safe_safe_2_p_t8	0.003999	0.000999	0.003000	89	6	12	89	45	89	0.62	0.11
emptyroom_d20_g10_corners_p_t8	0.183972	0.118982	0.064990	1376	1588	5443	1534	74	1376	11.51	10.01
coins_p10_p_t8	1.143826	1.102833	0.040993	1893	1716	3598	1917	1217	1710	1.80	1.23
sort_num_s_7_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring2_r6_p_t6	0.014997	0.011998	0.002999	300	238	780	325	41	300	0.62	0.05
coins_p01_p_t6	0.123981	0.114982	0.008999	665	632	1374	681	359	540	0.88	0.16
sort_num_s_7_p_t6	10.130460	8.735672	1.394788	4074	1260	2520	4074	175	4074	10.74	10.28
emptyroom_d16_g8_p_t6	0.095986	0.052992	0.042994	820	1142	3621	914	54	820	1.00	0.14
coins_p03_p_t8	0.215968	0.203969	0.011999	881	872	1910	905	471	716	0.84	0.29
ring_3_p_t6	0.008998	0.004999	0.003999	247	85	282	256	44	247	0.61	0.04
flip_1_p_t10	0	0	0	30	0	0	30	11	30	0.74	0.09
comm_p10_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t8	0.221967	0.208969	0.012998	881	872	1910	905	471	716	0.84	0.29
safe_safe_30_p_t6	0.072988	0.024996	0.047992	367	406	812	367	210	367	0.61	0.57
blocks_right_3_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
ring_4_p_t5	0.009998	0.006998	0.003000	269	142	476	282	50	269	0.54	0.03
bomb_b10_t5_p_t10	2.232661	2.165671	0.066990	3015	0	0	3015	2445	2850	2.92	2.40
blocks_right_2_p_t8	0.151976	0.113982	0.037994	468	1192	3837	542	101	308	2.38	2.09
blocks_right_5_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
flip_no_action_1_p_t6	0	0	0	30	11	32	30	13	30	0.60	0.01
bomb_b10_t10_p_t11	8.044777	7.819811	0.224966	5520	0	0	5520	4680	5280	8.80	8.20
uts_k4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
coins_p02_p_t5	0.086987	0.080988	0.005999	557	512	1106	569	303	452	0.70	0.11
comm_p01_p_t10	0.238964	0.177973	0.060991	1149	600	1200	1149	361	1070	1.07	0.29
emptyroom_d16_g8_p_t8	0.175973	0.115982	0.059991	1060	1634	5308	1218	62	1060	0.86	0.39
emptyroom_d16_g8_p_t5	0.067989	0.036994	0.030995	700	896	2775	762	50	700	0.48	0.61
bomb_b20_t5_p_t6	5.654140	5.508163	0.145977	4525	0	0	4525	3975	4350	6.01	6.29
emptyroom_d24_g12_p_t8	0.370944	0.233965	0.136979	1620	2666	8415	1858	78	1620	2.22	0.88
blocks_right_4_p_t5	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t5	1.126829	0.985850	0.140979	2571	2700	5400	2571	813	2475	1.73	1.19
blocks_right_4_p_t8	?	?	?	?	?	?	?	?	?	3700	3700
comm_p02_p_t8	0.414937	0.323951	0.090986	1524	1008	2016	1524	471	1440	0.98	0.45
blocks_right_3_p_t6	0.514922	0.414937	0.099985	610	2839	8635	806	155	430	79.01	13.57
flip_1_p_t5	0	0	0	15	0	0	15	6	15	0.57	0.06
blocks_right_6_p_t10	?	?	?	?	?	?	?	?	?	3700	3700
comm_p05_p_t10	4.270351	3.695438	0.574913	5121	5400	10800	5121	1473	4950	4.82	12.92
uts_k1_p_t8	0.005999	0.004999	0.001000	193	87	230	203	54	127	0.28	0.08
uts_k1_p_t10	0.008998	0.007998	0.001000	239	112	291	253	66	157	0.35	0.08
safe_safe_5_p_t8	0.003999	0.000999	0.003000	89	6	12	89	45	89	0.52	0.16
sort_num_s_3_p_t8	0.008998	0.006998	0.002000	216	16	32	216	33	216	0.59	0.07
bomb_b5_t1_p_t6	0.031995	0.028995	0.003000	402	0	0	402	270	360	0.69	0.31
emptyroom_d12_g6_p_t5	0.042993	0.023996	0.018997	516	620	1991	562	42	516	0.78	0.29

Benchmark Information					B+E($\sum$, 10)											B+E($\sum$, 100)											B+E($\sum$, 1000)											B+E($\sum$, ∞)										
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#output	#input	#forget	Cachet	SharpSAT
Planning	ring_5_p_t5	410	1061	2630	0.010998	0.008998	0.002000	340	156	510	353	57	340	0.95	0.32	0.037994	0.027995	0.009999	340	156	505	356	54	340	0.92	0.25	0.012998	0.009998	0.003000	340	156	505	356	54	340	0.84	0.20	0.010998	0.007998	0.003000	340	156	505	356	54	340	0.84	0.09
Planning	bomb_b10_t10_p_t17	15720	31300	84000	18.662163	18.142242	0.519921	8520	0	0	8520	7200	8160	19.60	19.69	55.841511	54.308744	1.532767	8520	0	0	8520	7200	8160	56.84	19.67	19.395052	18.871131	0.523921	8520	0	0	8520	7200	8160	20.13	19.67	19.475039	18.953119	0.521920	8520	0	0	8520	7200	8160	20.45	56.67
Planning	coins_p05_p_t6	1040	2821	7077	0.121982	0.114983	0.006999	665	632	1374	681	359	540	1.07	0.43	0.361945	0.337949	0.023996	665	632	1374	681	359	540	1.22	0.50	0.123982	0.115983	0.007999	665	632	1374	681	359	540	0.79	0.30	0.122981	0.113982	0.008999	665	632	1374	681	359	540	0.65	0.74
Planning	blocks_right_6_p_t6	3337	30517	82699	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	coins_p01_p_t8	1376	3757	9429	0.216967	0.203968	0.012999	881	872	1910	905	471	716	0.29	0.52	0.215968	0.203969	0.011999	881	872	1910	905	471	716	1.06	0.49	0.215967	0.203968	0.011999	881	872	1910	905	471	716	0.91	0.41	0.213967	0.202969	0.010998	881	872	1910	905	471	716	0.80	0.74
Planning	flip_no_action_1_p_t10	71	190	500	0.001000	0.001000	0	50	19	56	50	21	50	0.47	0.34	0.000999	0.000999	0	50	19	56	50	21	50	0.82	0.20	0.000999	0	0.000999	50	19	56	50	21	50	0.66	0.19	0.000999	0.000999	0	50	19	56	50	21	50	0.61	0.10
Planning	bomb_b20_t5_p_t10	14100	28025	75525	15.478646	15.082707	0.395939	7525	0	0	7525	6575	7250	15.95	15.96	15.566633	15.172693	0.393940	7525	0	0	7525	6575	7250	16.42	15.93	15.550636	15.154696	0.395940	7525	0	0	7525	6575	7250	16.38	16.00	16.007566	15.609627	0.397939	7525	0	0	7525	6575	7250	16.79	46.36
Planning	comm_p10_p_t6	10691	45324	115032	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	11.077316	10.231444	0.845872	6719	2108757471		8226	2465	6533	1879.45	3700	11.078316	10.228445	0.849871	6719	2108757468		8226	2465	6533	1888.01	3700
Planning	uts_k2_p_t8	833	3027	8156	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	safe_safe_2_p_t6	102	203	499	0.001999	0.000999	0.001000	67	6	12	67	35	67	0.72	0.32	0.007999	0.003000	0.004999	67	6	12	67	35	67	0.85	0.20	0.002999	0.000999	0.002000	67	6	12	67	35	67	0.35	0.21	0.001999	0	0.001999	67	6	12	67	35	67	0.44	0.06
Planning	comm_p01_p_t6	926	2745	7113	0.097985	0.068990	0.028995	589	1204	4359	676	250	538	1.26	0.68	0.263960	0.200970	0.062990	693	360	720	693	233	642	1.16	0.44	0.090986	0.068989	0.021997	693	360	720	693	233	642	0.76	0.30	0.089986	0.067989	0.021997	693	360	720	693	233	642	0.59	0.35
Planning	ring_5_p_t10	780	2091	5190	0.032994	0.025996	0.006998	662	379	1289	696	84	662	3.00	5.14	0.138979	0.119982	0.018997	663	373	1275	700	80	663	8.41	0.38	0.049992	0.041993	0.007999	665	361	1215	706	74	665	1.53	0.32	0.045993	0.039993	0.006000	665	361	1215	706	74	665	1.46	0.31
Planning	sort_num_s_4_p_t10	956	3602	9844	?	?	?	?	?	?	?	?	?	3700	406.63	?	?	?	?	?	?	?	?	?	3700	355.55	?	?	?	?	?	?	?	?	?	3700	264.11	5.204209	5.118222	0.085987	793	1106	4008	880	76	793	2558.88	394.87
Planning	bomb_b10_t10_p_t14	12960	25780	69180	12.844048	12.487102	0.356946	7020	0	0	7020	5940	6720	13.80	13.40	13.459954	13.089010	0.370944	7020	0	0	7020	5940	6720	14.28	13.47	12.969028	12.606083	0.362945	7020	0	0	7020	5940	6720	13.68	13.28	12.872043	12.510098	0.361945	7020	0	0	7020	5940	6720	13.50	13.01
Planning	ring_4_p_t6	392	1013	2512	0.010998	0.008998	0.002000	321	175	590	336	56	321	0.43	0.38	0.012998	0.009998	0.003000	321	175	590	337	55	321	0.84	0.26	0.012998	0.009998	0.003000	321	175	590	337	55	321	0.84	0.25	0.013997	0.009998	0.003999	321	175	590	337	55	321	0.53	1.03
Planning	coins_p05_p_t5	872	2353	5901	0.088986	0.080987	0.007999	557	512	1106	569	303	452	1.04	0.44	0.087986	0.080987	0.006999	557	512	1106	569	303	452	0.91	0.23	0.088986	0.080987	0.007999	557	512	1106	569	303	452	0.78	0.29	0.088986	0.081987	0.006999	557	512	1106	569	303	452	0.75	0.19
Planning	sort_num_s_5_p_t5	1100	4395	12090	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	0.381941	0.271958	0.109983	893	1481	5516	1021	79	893	2648.71	3700	0.334949	0.217967	0.116982	957	868	3256	1025	75	957	27.15	33.63
Planning	comm_p10_p_t8	14115	60420	153364	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	uts_k10_p_t10	21451	148891	358620	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	bomb_b10_t10_p_t19	17560	34980	93880	71.194177	69.275468	1.918709	9520	0	0	9520	8040	9120	72.33	26.56	25.117181	24.456282	0.660899	9520	0	0	9520	8040	9120	25.99	25.31	23.958358	23.301458	0.656900	9520	0	0	9520	8040	9120	24.78	24.94	24.696245	24.031346	0.664899	9520	0	0	9520	8040	9120	25.28	26.91
Planning	emptyroom_d28_g14_corners_p_t5	1436	4894	13028	0.170974	0.082988	0.087986	1298	943	3144	1356	80	1298	1.41	0.74	0.129981	0.080988	0.048993	1304	914	3070	1358	78	1304	1.24	0.58	0.129980	0.080987	0.048993	1304	914	3070	1358	78	1304	1.22	0.52	0.130980	0.081987	0.048993	1304	914	3070	1358	78	1304	1.01	0.44
Planning	safe_safe_30_p_t10	941	2256	5440	0.270958	0.056991	0.213967	93	2067	5923	610	331	93	1.20	0.66	0.178972	0.055991	0.122981	611	406	812	611	330	611	1.00	1.13	0.193970	0.060990	0.132980	611	406	812	611	330	611	0.85	0.34	0.178972	0.057991	0.120981	611	406	812	611	330	611	0.70	0.20
Planning	bomb_b20_t5_p_t5	7100	14025	37775	3.974396	3.872411	0.101985	3775	0	0	3775	3325	3625	4.97	4.34	3.986394	3.885409	0.100985	3775	0	0	3775	3325	3625	4.80	5.44	3.947400	3.849415	0.097985	3775	0	0	3775	3325	3625	4.70	4.23	4.096378	3.996393	0.099985	3775	0	0	3775	3325	3625	4.94	4.08
Planning	coins_p10_p_t6	2370	5943	14767	0.696894	0.660900	0.035994	1274	1982	4926	1435	935	1135	1.66	1.04	0.700894	0.668899	0.031995	1390	1435	3234	1441	929	1251	1.47	0.74	0.673898	0.644902	0.028996	1390	1435	3234	1441	929	1251	1.59	0.85	0.675898	0.644902	0.030996	1390	1435	3234	1441	929	1251	1.28	1.70
Planning	uts_k10_p_t6	13047	89563	215484	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	emptyroom_d28_g14_corners_p_t6	1712	5872	15632	0.584911	0.323951	0.260960	1467	1650	5665	1615	97	1467	8.61	6.01	0.188972	0.112983	0.075989	1520	1352	4585	1630	82	1520	3.08	1.36	0.193971	0.116983	0.076988	1520	1352	4585	1630	82	1520	3.06	1.48	0.186972	0.110983	0.075989	1520	1352	4585	1630	82	1520	2.75	1.31
Planning	coins_p03_p_t6	1040	2821	7077	0.383942	0.345948	0.037994	651	734	1756	679	361	526	3.19	2.60	0.123981	0.115982	0.007999	665	632	1374	681	359	540	0.95	0.14	0.369944	0.346947	0.022997	665	632	1374	681	359	540	1.27	0.30	0.123982	0.114983	0.008999	665	632	1374	681	359	540	1.00	0.15
Planning	uts_k3_p_t8	1737	7094	18770	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	safe_safe_10_p_t10	321	666	1640	0.018997	0.006998	0.011999	211	36	72	211	110	211	0.91	0.44	0.018997	0.006998	0.011999	211	36	72	211	110	211	0.77	0.33	0.018997	0.006998	0.011999	211	36	72	211	110	211	0.48	0.21	0.053991	0.019996	0.033995	211	36	72	211	110	211	0.63	0.15
Planning	blocks_right_2_p_t10	801	3781	10767	0.077988	0.048993	0.028995	561	1729	5639	624	177	361	35.37	122.96	0.110983	0.072989	0.037994	577	1570	5023	661	140	377	15.69	13.85	0.238964	0.199970	0.038994	578	1562	5007	671	130	378	16.24	16.15	1.085835	0.968853	0.116982	579	1554	4995	676	125	379	45.27	56.94
Planning	emptyroom_d12_g6_p_t10	1184	4154	10968	0.097985	0.069990	0.027995	922	1699	5633	1081	103	922	19.70	2.18	0.158976	0.117982	0.040994	936	1636	5492	1102	82	936	16.01	2.43	0.215968	0.166975	0.048993	956	1530	5092	1122	62	956	3.03	1.34	0.203969	0.155977	0.047992	956	1530	5092	1122	62	956	2.92	1.23
Planning	blocks_right_5_p_t8	3169	23162	60688	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	sort_num_s_3_p_t5	159	496	1322	0.004999	0.002999	0.002000	115	160	523	132	27	115	0.97	0.86	0.004999	0.003999	0.001000	135	10	20	135	24	135	0.76	0.31	0.004999	0.003999	0.001000	135	10	20	135	24	135	0.69	0.22	0.013998	0.009999	0.003999	135	10	20	135	24	135	0.61	0.16
Planning	ring_4_p_t8	512	1343	3332	0.017997	0.013997	0.004000	428	223	750	447	65	428	1.00	0.43	0.019996	0.014997	0.004999	425	241	818	447	65	425	0.84	0.30	0.019996	0.015997	0.003999	425	241	818	447	65	425	0.90	0.19	0.056992	0.043994	0.012998	425	241	818	447	65	425	1.05	0.16
Planning	bomb_b5_t5_p_t6	1600	3130	8230	0.182973	0.175974	0.006999	910	0	0	910	690	840	1.09	0.64	0.187971	0.178972	0.008999	910	0	0	910	690	840	0.95	0.54	0.187972	0.178973	0.008999	910	0	0	910	690	840	0.86	11.29	0.545917	0.521921	0.023996	910	0	0	910	690	840	1.15	0.69
Planning	emptyroom_d24_g12_p_t6	1464	5558	14472	0.155976	0.092985	0.062991	1182	2322	7356	1347	117	1182	1.76	1.01	0.201970	0.104984	0.096986	1252	1918	5825	1394	70	1252	1.18	0.61	0.199969	0.102984	0.096985	1252	1918	5825	1394	70	1252	0.95	1.67	0.585911	0.301954	0.283957	1252	1918	5825	1394	70	1252	1.52	0.78
Planning	comm_p04_p_t5	2577	8988	23308	0.704893	0.569914	0.134979	1363	5515	19239	1876	701	1280	15.15	10.47	0.679897	0.582912	0.096985	1953	1800	3600	1953	624	1870	1.46	0.96	0.662899	0.569914	0.092985	1953	1800	3600	1953	624	1870	1.38	2.20	1.993697	1.707740	0.285957	1953	1800	3600	1953	624	1870	2.73	1.97
Planning	bomb_b5_t1_p_t10	1104	2166	5586	0.081988	0.075989	0.005999	666	0	0	666	438	600	1.05	0.46	0.083987	0.077988	0.005999	666	0	0	666	438	600	0.94	0.51	0.084987	0.079987	0.005000	666	0	0	666	438	600	0.76	0.53	0.239964	0.223966	0.015998	666	0	0	666	438	600	1.16	0.19
Planning	sort_num_s_5_p_t8	1745	7020	19320	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	ring2_r8_p_t10	784	2527	6660	0.047993	0.036995	0.010998	652	607	2068	701	83	652	6.44	28.34	0.076988	0.063990	0.012998	651	613	2074	714	70	651	6.53	0.63	0.096986	0.084987	0.011999	655	589	1986	720	64	655	5.22	0.92	0.083987	0.071989	0.011998	656	583	1956	721	63	656	2.73	0.56
Planning	uts_k10_p_t8	17249	119227	287052	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	emptyroom_d24_g12_p_t10	2408	8894	23352	0.313952	0.212968	0.100984	1918	3805	12422	2222	186	1918	74.47	34.24	0.468929	0.356946	0.111983	1936	3706	12085	2274	134	1936	71.46	15.19	0.953855	0.621906	0.331949	1984	3431	11046	2321	87	1984	27.74	6.37	0.692895	0.510923	0.181972	1988	3414	10995	2322	86	1988	13.77	6.83
Planning	emptyroom_d28_g14_corners_p_t8	2264	7828	20840	0.226966	0.166975	0.059991	1885	2601	8958	2131	133	1885	37.66	25.13	0.343948	0.217967	0.125981	1918	2413	8248	2162	102	1918	29.09	22.47	0.334949	0.210968	0.123981	1952	2228	7618	2174	90	1952	26.17	19.28	0.335949	0.211968	0.123981	1952	2228	7618	2174	90	1952	26.05	19.81
Planning	uts_k1_p_t6	195	598	1626	0.003999	0.003999	0	149	65	180	153	42	99	0.91	0.38	0.011999	0.008999	0.003000	149	65	180	153	42	99	0.91	0.32	0.003999	0.002999	0.001000	149	65	180	153	42	99	0.70	0.15	0.003999	0.002999	0.001000	149	65	180	153	42	99	0.61	0.07
Planning	uts_k4_p_t6	2247	10057	26112	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	coins_p03_p_t5	872	2353	5901	0.085987	0.080988	0.004999	557	512	1106	569	303	452	1.03	0.41	0.087986	0.081987	0.005999	557	512	1106	569	303	452	0.86	0.44	0.258961	0.237964	0.020997	557	512	1106	569	303	452	1.01	0.28	0.087986	0.080987	0.006999	557	512	1106	569	303	452	0.85	0.11
Planning	emptyroom_d28_g14_corners_p_t10	2816	9784	26048	0.310953	0.241963	0.068990	2319	3463	11913	2642	174	2319	334.80	336.71	0.505923	0.405939	0.099984	2300	3589	12445	2675	141	2300	571.13	362.39	1.935706	1.408786	0.526920	2384	3104	10652	2718	98	2384	829.31	267.31	0.634904	0.453931	0.180973	2384	3104	10652	2718	98	2384	288.69	272.12
Planning	uts_k5_p_t8	4529	22272	56942	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	sort_num_s_7_p_t5	3549	15232	42014	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	3.077532	2.060687	1.016845	3395	1050	2100	3395	154	3395	3.60	4.25
Planning	comm_p02_p_t6	1515	4836	12576	0.248963	0.182973	0.065990	873	2688	9764	1103	412	807	3.02	2.64	0.231965	0.186972	0.044993	1146	756	1512	1146	369	1080	1.05	0.45	0.236964	0.186972	0.049992	1146	756	1512	1146	369	1080	0.78	0.93	0.235964	0.185972	0.049992	1146	756	1512	1146	369	1080	0.96	1.24
Planning	sort_num_s_5_p_t6	1315	5270	14500	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	1.136828	0.991850	0.144978	1144	1186	4493	1230	85	1144	378.52	353.59
Planning	comm_p10_p_t5	8979	37776	95866	7.997785	7.361881	0.635904	3979	2770990562		6652	2327	3818	2962.35	3700	7.872804	7.230901	0.641903	5637	1772748808		6860	2119	5476	566.86	3700	7.802814	7.179909	0.622905	5739	1707246019		6861	2118	5578	278.91	163.56	8.056775	7.427871	0.628904	5739	1707246022		6861	2118	5578	283.25	172.56
Planning	sort_num_s_4_p_t6	580	2166	5916	0.053991	0.024996	0.028995	468	758	2751	498	82	468	49.34	14.62	0.085987	0.044994	0.040993	465	778	2811	517	63	465	52.37	10.68	0.147977	0.107983	0.039994	479	658	2408	526	54	479	12.21	6.60	0.135979	0.098984	0.036995	485	604	2222	528	52	485	6.63	5.84
Planning	bomb_b10_t10_p_t8	7440	14740	39540	4.279350	4.161368	0.117982	4020	0	0	4020	3420	3840	5.24	4.68	4.276350	4.156368	0.119982	4020	0	0	4020	3420	3840	5.09	4.76	4.250354	4.137371	0.112983	4020	0	0	4020	3420	3840	4.96	4.63	4.401331	4.282349	0.118982	4020	0	0	4020	3420	3840	5.18	5.31
Planning	safe_safe_10_p_t8	259	542	1332	0.036994	0.003999	0.032995	97	313	1059	168	91	97	1.01	0.36	0.012998	0.003999	0.008999	169	36	72	169	90	169	0.75	0.50	0.012998	0.003999	0.008999	169	36	72	169	90	169	0.71	0.93	0.012998	0.004999	0.007999	169	36	72	169	90	169	0.53	0.99
Planning	emptyroom_d8_g4_p_t6	472	1550	4120	0.025996	0.015997	0.009999	377	496	1759	420	52	377	1.05	0.40	0.024996	0.015997	0.008999	396	406	1468	428	44	396	0.88	0.57	0.022996	0.015997	0.006999	396	406	1468	428	44	396	0.88	1.03	0.024996	0.015997	0.008999	396	406	1468	428	44	396	0.70	1.02
Planning	bomb_b10_t10_p_t10	9280	18420	49420	6.650989	6.460018	0.190971	5020	0	0	5020	4260	4800	7.54	7.05	6.567002	6.382030	0.184972	5020	0	0	5020	4260	4800	7.43	7.31	6.569001	6.389029	0.179972	5020	0	0	5020	4260	4800	7.30	6.83	6.867956	6.672986	0.194970	5020	0	0	5020	4260	4800	7.71	6.75
Planning	comm_p02_p_t10	2475	8052	20952	0.614907	0.477928	0.136979	1426	4644	17030	1821	654	1324	55.19	20.66	0.672898	0.483927	0.188971	1817	1745	4551	1901	574	1715	5.80	2.39	0.633904	0.485926	0.147978	1902	1260	2520	1902	573	1800	1.37	0.88	0.636904	0.489926	0.146978	1902	1260	2520	1902	573	1800	1.48	1.92
Planning	emptyroom_d8_g4_p_t5	396	1292	3436	0.017997	0.011998	0.005999	340	288	1070	356	40	340	0.97	0.33	0.017997	0.011998	0.005999	340	288	1071	356	40	340	0.78	0.82	0.016997	0.010998	0.005999	340	288	1071	356	40	340	0.70	0.19	0.018997	0.011998	0.006999	340	288	1071	356	40	340	0.63	0.07
Planning	ring2_r6_p_t8	482	1518	4000	0.023996	0.017997	0.005999	394	348	1181	422	60	394	1.21	0.81	0.028995	0.022996	0.005999	395	342	1150	432	50	395	1.07	0.88	0.028995	0.022996	0.005999	396	336	1120	433	49	396	0.97	0.23	0.029995	0.023996	0.005999	396	336	1120	433	49	396	0.89	0.20
Planning	ring_3_p_t5	254	636	1576	0.005999	0.002999	0.003000	208	61	199	214	40	208	0.97	0.44	0.006998	0.003999	0.002999	208	62	203	214	40	208	0.80	0.97	0.006998	0.004999	0.001999	208	62	203	214	40	208	0.68	0.17	0.006998	0.004999	0.001999	208	62	203	214	40	208	0.57	0.36
Planning	safe_safe_10_p_t6	197	418	1024	0.017997	0.002999	0.014998	65	268	860	126	71	65	0.93	0.36	0.007998	0.002999	0.004999	127	36	72	127	70	127	0.80	0.02	0.007998	0.002999	0.004999	127	36	72	127	70	127	0.81	0.19	0.008998	0.002999	0.005999	127	36	72	127	70	127	0.70	0.43
Planning	safe_safe_5_p_t10	166	331	815	0.005999	0.001999	0.004000	111	6	12	111	55	111	0.97	0.32	0.004999	0.000999	0.004000	111	6	12	111	55	111	0.77	0.54	0.005999	0.001999	0.004000	111	6	12	111	55	111	0.66	0.24	0.004999	0.001999	0.003000	111	6	12	111	55	111	0.84	0.15
Planning	emptyroom_d20_g10_corners_p_t5	1020	3454	9188	0.072988	0.046992	0.025996	894	795	2690	952	68	894	1.25	0.60	0.071989	0.044994	0.026995	920	658	2237	958	62	920	0.97	0.52	0.071989	0.045993	0.025996	920	658	2237	958	62	920	1.02	0.33	0.071989	0.045993	0.025996	920	658	2237	958	62	920	0.76	0.36
Planning	ring2_r8_p_t5	404	1282	3370	0.017997	0.011998	0.005999	333	276	916	358	46	333	1.00	0.34	0.017997	0.012998	0.004999	336	258	826	361	43	336	0.86	0.43	0.017997	0.012998	0.004999	336	258	826	361	43	336	0.66	0.21	0.018997	0.012998	0.005999	336	258	826	361	43	336	0.91	0.25
Planning	emptyroom_d4_g2_p_t8	296	926	2432	0.013997	0.009998	0.003999	211	353	1157	249	47	211	0.93	0.35	0.016997	0.010998	0.005999	222	312	1081	256	40	222	0.88	0.48	0.013997	0.009998	0.003999	222	312	1081	256	40	222	0.82	0.15	0.015997	0.009998	0.005999	222	312	1081	256	40	222	0.60	0.15
Planning	uts_k2_p_t5	530	1899	5108	0.036994	0.021996	0.014998	368	624	1773	409	121	236	3.28	1.28	0.032994	0.021996	0.010998	397	461	1193	418	112	265	3.10	0.93	0.032994	0.021996	0.010998	397	461	1193	418	112	265	2.99	0.59	0.032994	0.022996	0.009998	397	461	1193	418	112	265	3.07	0.51
Planning	emptyroom_d20_g10_corners_p_t6	1216	4144	11024	0.102985	0.061991	0.040994	1035	1170	4018	1144	72	1035	2.11	1.21	0.103984	0.064990	0.038994	1072	968	3305	1150	66	1072	1.79	1.29	0.105984	0.065990	0.039994	1072	968	3305	1150	66	1072	1.64	1.44	0.105983	0.066989	0.038994	1072	968	3305	1150	66	1072	1.44	0.86
Planning	comm_p03_p_t8	2936	9999	25999	0.873868	0.694895	0.178973	1600	6136	22048	2153	783	1497	110.10	20.53	0.970853	0.700894	0.269959	2111	2758	7698	2254	682	2008	25.28	15.35	0.859870	0.707893	0.151977	2255	1792	3584	2255	681	2152	1.64	1.69	0.859870	0.702893	0.156977	2255	1792	3584	2255	681	2152	1.44	3.33
Planning	uts_k3_p_t10	2159	8856	23446	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	blocks_right_4_p_t10	2639	16533	44365	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	coins_p10_p_t10	3898	9879	24559	5.328190	5.061230	0.266960	2097	3495	9028	2385	1513	1870	7.24	2.42	1.796727	1.741735	0.054992	2361	2166	4552	2393	1505	2134	2.60	2.38	1.796727	1.741735	0.054992	2361	2166	4552	2393	1505	2134	2.53	1.96	1.806726	1.749734	0.056992	2361	2166	4552	2393	1505	2134	2.48	1.82
Planning	coins_p04_p_t10	1712	4693	11781	0.991849	0.939857	0.051992	1069	1275	3062	1127	585	864	2.05	1.06	0.339949	0.324951	0.014998	1097	1112	2446	1129	583	892	1.13	0.60	0.338948	0.322950	0.015998	1097	1112	2446	1129	583	892	1.01	0.49	0.986850	0.941857	0.044993	1097	1112	2446	1129	583	892	1.63	1.15
Planning	bomb_b10_t10_p_t12	11120	22100	59300	27.541813	26.759932	0.781881	6020	0	0	6020	5100	5760	28.57	10.22	9.450563	9.184604	0.265959	6020	0	0	6020	5100	5760	10.24	9.82	9.805509	9.528551	0.276958	6020	0	0	6020	5100	5760	10.56	9.78	9.409569	9.143610	0.265959	6020	0	0	6020	5100	5760	10.07	9.55
Planning	safe_safe_5_p_t5	86	171	420	0.003999	0.001999	0.002000	56	6	12	56	30	56	1.01	0.84	0.000999	0	0.000999	56	6	12	56	30	56	0.76	0.37	0.001999	0.000999	0.001000	56	6	12	56	30	56	0.71	0.17	0.004999	0.001999	0.003000	56	6	12	56	30	56	0.82	0.04
Planning	coins_p02_p_t10	1712	4693	11781	0.990849	0.936858	0.053991	1069	1275	3062	1127	585	864	2.04	1.93	0.338949	0.322951	0.015998	1097	1112	2446	1129	583	892	1.10	0.37	0.338949	0.323951	0.014998	1097	1112	2446	1129	583	892	1.18	0.48	0.986850	0.941857	0.044993	1097	1112	2446	1129	583	892	1.62	1.06
Planning	emptyroom_d8_g4_p_t10	776	2582	6856	0.158975	0.112982	0.045993	605	945	3268	689	87	605	26.73	5.03	0.077988	0.055992	0.021996	600	980	3391	707	69	600	12.05	4.50	0.096985	0.078987	0.017998	620	878	3054	716	60	620	2.22	2.27	0.237963	0.187971	0.049992	620	878	3055	716	60	620	5.31	1.53
Planning	bomb_b10_t10_p_t5	4680	9220	24720	1.704741	1.656748	0.047993	2520	0	0	2520	2160	2400	2.69	5.96	1.702741	1.657748	0.044993	2520	0	0	2520	2160	2400	2.48	1.94	1.713740	1.666747	0.046993	2520	0	0	2520	2160	2400	2.47	2.85	4.984242	4.847263	0.136979	2520	0	0	2520	2160	2400	5.51	5.27
Planning	uts_k3_p_t5	1104	4451	11756	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	bomb_b10_t5_p_t8	4380	8655	23055	4.244355	4.110375	0.133980	2415	0	0	2415	1965	2280	4.32	2.04	1.437782	1.390789	0.046993	2415	0	0	2415	1965	2280	2.27	1.73	4.219358	4.080379	0.138979	2415	0	0	2415	1965	2280	4.99	1.66	4.248354	4.115374	0.132980	2415	0	0	2415	1965	2280	4.97	2.44
Planning	sort_num_s_6_p_t8	3324	13926	38412	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	780.529342	778.406665	2.122677	3168	840	1680	3168	156	3168	782.57	784.57
Planning	blocks_right_4_p_t6	1595	9981	26781	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700
Planning	emptyroom_d4_g2_p_t10	368	1154	3032	0.018997	0.013997	0.005000	258	467	1515	302	66	258	0.99	0.34	0.022996	0.016997	0.005999	260	454	1479	316	52	260	0.85	0.45	0.068990	0.050993	0.017997	270	420	1426	320	48	270	0.86	0.15	0.024996	0.017997	0.006999	270	420	1426	320	48	270	0.63	1.03
Planning	bomb_b20_t5_p_t8	11300	22425	60425	9.944488	9.695526	0.248962	6025	0	0	6025	5275	5800	10.88	10.44	9.942489	9.689527	0.252962	6025	0	0	6025	5275	5800	10.78	10.40	29.398531	28.649645	0.748886	6025	0	0	6025	5275	5800	30.27	10.28	10.049472	9.800510	0.248962	6025	0	0	6025	5275	5800	10.84	11.17

Benchmark Information				B+E(Σ, 10)												B+E(Σ, 100)												B+E(Σ, 1000)												B+E(Σ, ∞)											
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
Planning	ftlp_1_p_t8	33	80	208	?	?	?	?	?	?	24	9	24	0.87	0.37	?	?	?	?	?	?	?	?	?	24	0.87	0.43	0.000899	0	0.000999	24	9	24	9	24	9	24	0.23	0.18	?	?	?	?	?	?	?	?	?	24	9	24	0.58	1.05
Planning	blocks_right_2_p_t6	485	2277	6479	0.036994	0.017997	0.018997	340	1306	3243	384	101	220	1.29	0.60	0.049992	0.030995	0.018997	353	867	2700	400	85	233	0.95	0.54	0.191971	0.123982	0.067989	355	851	2681	406	79	235	1.39	0.33	0.060990	0.038994	0.021996	355	851	2680	406	79	235	0.92	0.44
Planning	uts_k10_p_t5	10946	74731	179700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	bomb_b10_t5_p_t5	2760	5415	14415	0.581912	0.563915	0.017997	1515	0	0	1515	1245	1425	1.58	0.92	0.581911	0.562914	0.018997	1515	0	0	1515	1245	1425	1.49	0.81	0.584911	0.566914	0.017997	1515	0	0	1515	1245	1425	1.28	0.85	0.579912	0.559915	0.019997	1515	0	0	1515	1245	1425	0.75	0.70	0.579912	0.559915	0.019997	1515	0	0	1515	1245	1425	0.70	0.70
Planning	bomb_b5_t5_p_t10	2640	5210	13710	0.499924	0.477928	0.021996	1510	0	0	1510	1130	1400	1.44	0.81	0.501924	0.480927	0.020997	1510	0	0	1510	1130	1400	1.30	0.78	0.500923	0.479927	0.020996	1510	0	0	1510	1130	1400	1.13	0.67	0.499924	0.477928	0.021996	1510	0	0	1510	1130	1400	1.01	0.82	0.499924	0.477928	0.021996	1510	0	0	1510	1130	1400	1.01	0.82
Planning	emptyroom_d4_g2_p_t5	188	584	1532	0.005999	0.004999	0.001000	140	184	618	158	30	140	0.99	0.32	0.006998	0.003999	0.002999	152	110	369	160	28	152	0.80	0.35	0.005999	0.002999	0.003000	152	110	369	160	28	152	0.69	0.14	0.006998	0.004999	0.001999	152	110	369	160	28	152	0.52	0.04
Planning	uts_k2_p_t10	1035	3779	10188	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	ring_5_p_t6	484	1267	3142	0.014997	0.011998	0.002999	404	203	677	424	60	404	0.91	0.33	0.016997	0.012998	0.003999	405	197	647	426	58	405	0.82	0.35	0.017997	0.013997	0.004000	405	197	647	426	58	405	0.72	0.24	0.015997	0.011998	0.003999	405	197	647	426	58	405	0.84	1.03
Planning	coins_p04_p_t6	1040	2821	7077	0.124981	0.113982	0.010999	657	662	1492	680	360	532	1.11	0.51	0.123981	0.115982	0.007999	665	632	1374	681	359	540	0.91	0.52	0.124981	0.115983	0.008998	665	632	1374	681	359	540	0.98	0.31	0.122982	0.114983	0.007999	665	632	1374	681	359	540	0.62	0.25
Planning	safe_safe_5_p_t6	102	203	499	0.001999	0	0.001999	67	6	12	67	35	67	0.89	0.43	0.001999	0	0.001999	67	6	12	67	35	67	0.80	0.31	0.000999	0.000999	0	67	6	12	67	35	67	0.70	0.14	0.002999	0.000999	0.002000	67	6	12	67	35	67	0.74	0.28
Planning	blocks_right_3_p_t5	804	4343	12006	0.122982	0.045993	0.076989	475	2684	8481	638	166	325	22.97	5.03	0.148978	0.066990	0.081988	496	2485	7661	663	141	346	2.599	6.85	0.220967	0.142979	0.077988	518	2287	6871	672	132	368	8.99	1.87	0.218967	0.150977	0.067990	518	2287	6871	673	131	368	8.38	2.37
Planning	blocks_right_6_p_t8	4431	39629	105723	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	emptyroom_d20_g10_corners_p_t10	2000	6904	18368	0.189971	0.139979	0.049992	1635	2450	8401	8856	144	1635	147.10	175.93	0.298955	0.233965	0.064990	1617	2568	8901	1884	116	1617	231.33	131.23	0.365945	0.263960	0.101985	1680	2208	7579	1918	82	1680	122.59	137.05	0.355945	0.255961	0.099984	1680	2208	7579	1918	82	1680	122.48	136.83
Planning	comm_p04_p_t10	5017	17958	46598	?	?	?	?	?	?	?	?	?	3700	3700	2.712588	2.096681	0.615907	3657	5063	13386	3887	1130	3509	522.18	3700	2.468625	2.082683	0.385942	3888	3600	7200	3888	1129	3740	3.16	2.69	2.475624	2.101681	0.373943	3888	3600	7200	3888	1129	3740	3.00	3.52
Planning	sort_num_s_6_p_t6	2502	10452	28824	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	4.173366	3.715435	0.457931	2376	630	1260	2376	126	2376	4.83	5.05
Planning	coins_p01_p_t5	872	2353	5901	0.086987	0.080988	0.005999	557	512	1106	569	303	452	0.67	0.55	0.087988	0.080989	0.006999	557	512	1106	569	303	452	0.88	0.38	0.086987	0.080988	0.005999	557	512	1106	569	303	452	0.94	0.27	0.085987	0.079988	0.005999	557	512	1106	569	303	452	0.58	1.07
Planning	uts_k5_p_t5	2876	13971	35660	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	sort_num_s_4_p_t5	486	1807	4934	0.040993	0.018997	0.021996	391	621	2248	415	71	391	8.15	6.25	0.060990	0.029995	0.030995	396	579	2091	435	51	396	5.93	4.35	0.064990	0.039993	0.024997	413	422	1562	440	46	413	1.48	0.90	0.068989	0.042993	0.025996	413	422	1562	440	46	413	1.36	0.73
Planning	emptyroom_d24_g12_p_t5	1228	4724	12252	0.116983	0.069990	0.046993	1015	1855	5750	1142	86	1015	0.81	0.53	0.151976	0.072988	0.078988	1068	1544	4534	1162	66	1068	0.98	0.54	0.145978	0.072989	0.072989	1068	1544	4534	1162	66	1068	0.90	0.32	0.150977	0.072989	0.077988	1068	1544	4534	1162	66	1068	0.73	1.18
Planning	blocks_right_2_p_t5	406	1901	5407	0.027996	0.012998	0.014998	287	793	2511	325	81	187	1.00	0.51	0.036994	0.018997	0.017997	297	695	2140	338	68	197	0.87	0.33	0.040993	0.021996	0.018997	299	679	2122	341	65	199	0.74	0.21	0.039993	0.020996	0.018997	299	679	2122	341	65	199	0.65	1.08
Planning	flip_no_action_1_p_t5	36	95	250	0	0	0	25	9	26	25	11	25	0.93	0.29	0	0	0	25	9	26	25	11	25	0.78	0.27	0	0	0	25	9	26	25	11	25	0.86	0.14	0	0	0	25	9	26	25	11	25	0.62	0.99
Planning	comm_p03_p_t10	3644	12495	32495	1.295803	1.061839	0.233964	1992	7993	27539	2682	462	1867	525.33	60.14	1.338797	1.072837	0.265960	2706	2824	6903	2814	830	2581	300.00	2.25	1.347795	1.107832	0.239963	2815	2240	4480	2815	829	2690	2.06	1.45	1.307801	1.071837	0.235964	2815	2240	4480	2815	829	2690	2.01	2.33
Planning	bomb_b10_t5_p_t6	3300	6495	17295	0.813876	0.785881	0.027995	1815	0	0	1815	1485	1710	1.72	1.24	0.808877	0.782881	0.025996	1815	0	0	1815	1485	1710	0.84	1.79	0.821875	0.792880	0.028995	1815	0	0	1815	1485	1710	1.47	1.05	0.845871	0.815875	0.029996	1815	0	0	1815	1485	1710	1.68	0.97
Planning	uts_k4_p_t10	3691	16705	43440	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	coins_p03_p_t10	1712	4693	11781	0.351946	0.331949	0.019997	1068	1258	2931	1128	584	863	1.31	0.66	0.338948	0.322950	0.015998	1097	1112	2446	1129	583	892	1.13	0.64	0.338948	0.322950	0.015998	1097	1112	2446	1129	583	892	1.23	0.51	0.336949	0.321951	0.014998	1097	1112	2446	1129	583	892	1.16	1.36
Planning	uts_k4_p_t5	1886	8395	21890	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	comm_p02_p_t5	1275	4032	10482	0.181973	0.134980	0.046993	736	2210	8029	922	353	679	2.44	1.73	0.173973	0.139978	0.033995	957	630	1260	957	318	900	1.01	0.37	0.167975	0.133980	0.033995	957	630	1260	957	318	900	0.87	0.32	0.166974	0.132979	0.033995	957	630	1260	957	318	900	0.72	0.24
Planning	ring2_r6_p_t10	598	1892	4988	0.031995	0.023996	0.007999	491	440	1490	531	67	491	3.75	5.59	0.047992	0.039993	0.007999	488	458	1556	535	63	488	4.41	0.45	0.063990	0.054991	0.008999	491	440	1490	540	58	491	3.50	5.54	0.054991	0.047992	0.006999	492	434	1460	541	57	492	2.02	1.17
Planning	comm_p04_p_t6	3065	10782	27966	0.957855	0.787881	0.169974	1615	6706	23468	2242	823	1519	44.19	34.54	0.932858	0.796879	0.135979	2340	2160	4320	2340	725	2244	1.74	1.25	0.923860	0.788880	0.134980	2340	2160	4320	2340	725	2244	1.62	1.05	0.925860	0.790880	0.134980	2340	2160	4320	2340	725	2244	1.46	1.93
Planning	emptyroom_d12_g6_p_t6	720	2546	6696	0.049992	0.030995	0.018997	567	997	3264	650	70	567	0.81	0.53	0.058991	0.033994	0.024997	604	802	2609	674	46	604	0.94	0.34	0.058991	0.033994	0.024997	604	802	2609	674	46	604	0.83	0.20	0.059990	0.034994	0.024996	604	802	2609	674	46	604	0.67	1.06
Planning	comm_p03_p_t5	1874	6255	16255	0.381942	0.294956	0.086986	1015	3803	13622	1359	515	945	6.46	4.50	0.352947	0.295955	0.056992	1415	1120	2240	1415	459	1345	1.09	0.62	0.356946	0.296955	0.059991	1415	1120	2240	1415	459	1345	1.06	0.51	0.352947	0.295955	0.056992	1415	1120	2240	1415	459	1345	1.16	0.43
Planning	blocks_right_5_p_t10	3951	28816	75396	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	comm_p05_p_t8	5310	19605	50709	2.794575	2.386637	0.407938	2649	13153	45911	3931	1379	2508	1887.83	700	8.707676	7.067925	1.639751	3774	6200	16517	4099	1211	3633	938.08	62.01	2.783577	2.424631	0.358946	4101	4320	8640	4101	1209	3960	3.47	2.98	2.793575	2.434630	0.358945	4101	4320	8640	4101	1209	3960	3.40	3.79
Planning	safe_safe_30_p_t5	486	1346	3170	0.055991	0.018997	0.036994	306	406	812	306	180	306	1.02	0.36	0.055991	0.018997	0.036994	306	406	812	306	180	306	0.89	0.27	0.054991	0.018997	0.035994	306	406	812	306	180	306	0.75	0.18	0.053991	0.017997	0.035994	306	406	812	306	180	306	0.61	1.04
Planning	ring2_r8_p_t6	480	1531	4028	0.021996	0.015997	0.005999	394	359	1200	424	56	394	0.98	0.37	0.024996	0.018997	0.005999	400	323	1052	433	47	400	0.88	0.27	0.024996	0.017997	0.006999	400	323	1052	433	47	400	0.92	0.17	0.025996	0.018997	0.006999	400	323	1052	433	47	400	0.78	1.03
Planning	bomb_b5_t1_p_t8	888	1734	4470	0.052991	0.048992	0.003999	534	0	0	534	354	480	1.02	0.55	0.054991	0.050992	0.003999	534	0	0	534	354	480	0.90	0.49	0.053991	0.049992	0.003999	534	0	0	534	354	480	0.77	0.26	0.050992	0.046992	0.004000	534	0	0	534	354	480	0.60	1.12
Planning	blocks_right_5_p_t6	2387	17508	45980	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	sort_num_s_6_p_t10	4146	17400	48000	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	comm_p01_p_t5	780	2289	5929	0.070990	0.047993	0.022997	485	1059	3878	559	221	441	1.25	0.62	0.064990	0.048993	0.015997	579	300	600	579	201	535	0.83	0.53	0.064990	0.049992	0.014998	579	300	600	579	201	535	0.75	0.23	0.188972	0.142979	0.045993	579	300	600	579	201	535	0.78	1.04
Planning	4blocksb	410	24758	69182	0.023996	0.005999	0.017997	408	0	0	408	2	54	0.91	0.44	0.024996	0.005999	0.018997	408	0	0	408	2	54	0.85	0.58	0.024996	0.005999	0.018997	408	0	0	408	2	54	0.67	0.22	0.068990	0.016998	0.051992	408	0	0	408	2	54	0.67	1.07
Planning	logistics_a	828	6718	17915	0.059991	0.046993	0.012998	567	1044	2934	670	158	130	1.18	0.44	0.066990	0.053992	0.012998	568	1047	2952	675	153	131	1.02	0.74	0.065990	0.051992	0.013998	568	1047	2952	675	153	131	1.03	0.26	0.196970	0.155976	0.040994	568	1047	2952	675	153	131	1.53	0.19
Planning	medium	116	953	2133	0	0	0	115	0	0	115	1	18	0.86	0.30	0.000999	0	0.000999	115	0	0	115	1	18	0.78	0.40	0.000999	0	0.000999	115	0	0	115	1	18	0.63	0.26	0.002000	0.001000	0.001000	115	0	0	115	1	18	0.72	0.40
Planning	prob011_2_pddl	2324	31857	64476	0.569913	0.475928	0.093985	1529	3645	8916	168	643	445	18.45	5.31	0.634904	0.547917	0.086987	1482	4418	9928	1643	681	398	31.49	53.45	0.640903	0.552916	0.087987	1481	4399	9874	1643	681	397	26.44	10.76	1.869716	1.619754	0.249962	1481	4399	9874	1643	681	397	75.49	10.20
Planning	prob004_pddl	2303	20963	42581	1.236812	1.061839	0.174973	1724	1800	4403	1876	427	668	121.73	2.20	0.472928	0.414937	0.057991	1682	2071	4890	1836	467	626	11.15	1.92	0.472928	0.416937	0.055991	1682	2071	4890	1836	467	626	11.17	2.06	0.468929	0.414937	0.053992	1682	2071	4890	1836	467	626	10.86	2.87
Planning	4blocks	758	47820	133940	1.756733	1.412785	0.343948	330	3560	10522	602	156	41	4.45	2.99	2.429630	2.030691	0.398939	344	3435	10141	678	80	55	5.38	3.31	3.246506	2.822570	0.423936	345	3634	10881	698	60	56	5.87	4.21	3.189515	2.765579	0.423936	345	3638	10862	701	57	56	5.60	4.93
Planning	4step	165	418	831	0.001999	0.000999	0.001000	131	42	97	132	33	51	0.97	0.31	0.001999	0.000999	0.001000	131	42	97	132	33	51	0.80	0.23	0.000999	0.000999	0	131	42	97	132	33	51	0.75	0.17	0.000999	0.000999	0	131	42	97	132	33	51	0.73	0.46
Planning	tire-2	550	2001	4115	0.010998	0.009998	0.001000	449	200	474	458	92	86	0.91	0.32	0.010998	0.009998	0.001000	449	200	474	458	92	86	0.81	0.35	0.010998	0.009998	0.001000	449	200	474	458	92	86	0.90	0.16	0.010998	0.008998	0.002000	449	200	474	458	92	86	0.87	0.51
Planning	3blocks	283	9690	26810	0.041994	0.016998	0.024996	197	344	947	257	26	45	0.98	0.48	0.042994	0.017998	0.024996	188	419	1160	260	23	36	0.83	0.35	0.041994	0.016998	0.024996	188	419	1160	260	23	36	0.66	0.21	0.042994	0.017998	0.024996	188	419	1160	260	23	36	0.57	1.02
Planning	prob003_pddl	1413	29487	59481	0.289956	0.222966	0.066990	1111	1114	2856	1198	215	423	1.18	0.61	0.335949	0.251962	0.083987	1083	1748	4458	1197	216	395	1.14	0.63	0.337949	0.252961	0.084988	1083	1748	4458	1197	216	395	1.18	0.51	0.336949	0.253962	0.082987	1083	1748	4458	1197	216	395	1.08	0.38
Planning	bw_large.d	6325	131973	294118	0.564914	0.532919	0.031995	6237	277	721	6306	19	191	1.50	0.90	0.540917	0.509922	0.030995	6237	277	721	6306	19	191	1.30	0.89	0.528920	0.496925	0.031995	6237	277	721	6306	19	191	1.20	0.74	0.540917	0.510922	0.029995	6237	277	721	6306	19	191	1.17	1.06
Planning	hanoi-4	718	4934	12200	0.037995	0.036995	0.001000	718	0	0	718	0	0	0.99	0.40	0.038994	0.037995	0.000999	718	0	0	718	0	0	0.87	0.48	0.038994	0.038994	0	718	0	0	718	0	0	0.60	0.22	0.038994	0.037994	0.001000	718	0	0	718	0	0	0.62	0.62
Planning	prob001_pddl	939	3785	7727	0.031995	0.029995	0.002000	732	409	966	758	181	101	0.90	0.35	0.031995	0.029996	0.001999	730	444	1041	756	183	99	0.85	0.45	0.031995	0.029996	0.001999	730	444	1041	756	183	99	0.66	0.16	0.031995	0.029995	0.002000	730	444	1041	756	183	99	0.78	1.03
Planning	5step	177	475	959	0	0	0	143	32	64	143	34	10	0.92	0.31	0.000999	0.000999	0	143	32	64	143	34	10	0.80	0.23	0.000999	0.000999	0	143	32	64	143	34	10	0.73	0.13	0.000999	0	0.000999	143	32	64	143	34	10	0.52	0.16
Planning	log-4	2303	20963	42581	0.425935	0.362945	0.062990	1724	1800	4403	1876	427	668	42.09	2.22	0.470928	0.415937	0.054991	1682	2071	4890	1836	467	626	11.09	2.17	0.480927	0.426935	0.053992	1682	2071	4890	1836	467	626	11.15	2.02	0.471928	0.415937	0.055991	1682	2071	4890	1836	467	626	10.97	2.12
Planning	bw_large.b	1087	13772	31767	0.000999	0.000000	0.001999	1086	0	0	1086	1	18	0.89	0.25	0.004999	0.003000	0.001999	1086	0	0	1086	1	18	0.83	0.23	0.005000	0.003000	0.002000	1086	0	0	1086	1	18	0.65	0.13	0.005000	0.003000	0.002000	1086	0	0	1086	1	18	0.70	0.98
Planning	log-5	2701	29534	59897	1.249810	1.068837	0.180973	1650	5194	13110	1821	880	674	169.82	19.75	1.935706	1.700741	0.234965	1510	8873	20115	1777	924	534	3.593	8.98	1.988698	1.730737	0.257961	1508	9501	21456	1771	930	532	52.31	9.11	5.770123	5.028236	0.741887	1508	9501	21456	1771	930	532	151.62	8.85
Planning	logistics_d	4713	21991	51347	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700	?	?	3700	3700
Planning	log-1	939	3785	7730	0.090986	0.084987	0.005999	732	409	966	758	181	101	1.12	0.43	0.032994	0.030995	0.001999	730	444	1041	756	183	99	0.80	0.34	0.030996	0.028996	0.002000	730	444	1041	756	183	99	0.66	0.19	0.092986	0.086987	0.005999	730	444	1041	756	183	99	0.86	0.83
Planning	log-3	1413	29487	59481	0.848871	0.650901	0.197970	1111	1114	2856	1198	215	423	1.85	1.35	0.333949	0.250962	0.082987	1083	1748	4458	1197	216	395	1.36	0.75	0.339948	0.252961	0.086987	1083	1748	4458	1197	216	395	1.18	0.46	0.984851	0.740888	0.243963	1083	1748	4458	1197	216	395	1.79	1.22
Planning	prob002_pddl	1337	24777	50017	1.169822	0.830874	0.338948	950	1752	4616	1080	257	413	2.31	1.73	0.522921	0.385942	0.136979	910	3096	7852	1078	259	373	0.82	0.85	0.540918	0.399939	0.140979	910	3096	7852	1078	259	373	1.67	0.74	1.536766	1.141826	0.394940	910	3096	7852	1078	259	373	2.56	1.06
Planning	tire-4	812	3222	6629	0.062991	0.056992	0.005999	669	323	777	684	128	136	1.10	0.44	0.020996	0.018997	0.001999	669	323	777	684	128	136	0.83	0.32	0.020996	0.018997	0.001999	669	323	777	684	128	136	0.85	0.06	0.061991	0.055992	0.005999	669	323	777	684

Benchmark Information					B+E(Σ, 10)										
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
Circuit	c1908.isc	751	2053	4723	0.034994	0.020996	0.013998	641	435	1522	707	44	641	299.04	20.32
Circuit	c1355.isc	555	1546	3610	0.024996	0.018997	0.005999	463	304	1096	504	51	463	45.01	3700
Circuit	s953.bench	417	1138	2624	0.016997	0.008998	0.007999	394	2	4	394	23	394	0.88	0.30
Circuit	s820.bench	312	1046	2560	0.018997	0.006998	0.011999	266	183	737	287	25	266	0.91	0.31
Circuit	s838.1.bench	512	1233	2807	0.021996	0.013997	0.007999	446	0	0	446	66	446	0.94	0.42
Circuit	s1488.bench	667	2040	4814	0.046992	0.014997	0.031995	598	312	1090	649	18	598	1.00	0.36
Circuit	s1494.bench	661	2040	4826	0.044993	0.014997	0.029996	603	244	844	644	17	603	0.93	0.36
Circuit	s1196.bench	560	1538	3556	0.024996	0.014997	0.009999	517	82	311	527	33	517	0.95	0.34
Circuit	s510.bench	236	635	1483	0.006998	0.003999	0.002999	211	0	0	211	25	211	0.35	0.41
Circuit	s526.bench	217	638	1528	0.004999	0.002999	0.002000	193	0	0	193	24	193	0.40	0.30
Circuit	s713.bench	447	984	2166	0.009998	0.007998	0.002000	393	0	0	393	54	377	0.90	0.31
Circuit	s526n.bench	218	639	1529	0.004999	0.002999	0.002000	194	0	0	194	24	194	0.96	0.31
Circuit	s832.bench	310	1056	2594	0.023996	0.006998	0.016998	256	258	1013	284	26	256	0.90	0.32
Circuit	s444.bench	205	533	1237	0.003999	0.002999	0.001000	181	0	0	181	24	180	0.94	0.30
Circuit	s400.bench	189	486	1130	0.002999	0.001999	0.001000	164	0	0	164	25	164	0.88	0.46
Circuit	s641.bench	433	918	1996	0.008998	0.006998	0.002000	379	0	0	379	54	379	0.95	0.31
Circuit	s420.1.bench	252	601	1367	0.006998	0.003999	0.002999	218	0	0	218	34	218	0.86	0.32
Circuit	s1423.bench	748	1821	4149	0.035994	0.031995	0.003999	645	86	335	655	93	645	0.96	0.34
Circuit	s1238.bench	539	1549	3631	0.024996	0.013997	0.010999	495	81	306	506	33	495	0.87	0.31
Configuration	C169_FW	1411	1982	2786	0.008998	0.008998	0	1349	52	107	1349	62	2	0.92	0.30
Configuration	C210_FW	2024	9705	40743	?	?	?	?	?	?	?	?	?	3700	3700
Configuration	D1119_M20	1400	1698	2473	0.006998	0.005999	0.000999	1356	83	217	1356	44	2	0.03	0.28
Configuration	C169_FV	1411	1982	2786	0.006998	0.006998	0	1349	52	107	1349	62	2	0.95	0.31
Configuration	C170_FR	1874	10610	49027	0.244963	0.157976	0.086987	1220	4800	20065	1227	647	11	30.71	3700
Configuration	C220_FV	1933	6580	22610	0.201970	0.166975	0.034995	1202	2160	7327	1212	721	21	321.17	180.39
Configuration	C638_FVK	1761	3162	6433	0.148977	0.086986	0.061991	1286	705	22419	1287	474	16	1.44	0.91
Configuration	C163_FW	1815	4797	15866	0.130980	0.113983	0.016997	1245	1278	4895	1253	562	24	1.66	0.63
Configuration	C171_FR	1758	4005	9705	0.088987	0.081988	0.006999	1297	1495	3031	1299	459	10	1.50	0.94
Configuration	C129_FR	1888	7404	23769	0.185972	0.161976	0.023996	1180	2589	7701	1185	703	20	162.23	11.46
Configuration	C203_FW	2030	7234	21289	0.188972	0.168975	0.019997	1284	1908	6096	1293	737	20	72.66	21.03
Configuration	C215_FC	1848	4898	13032	0.140979	0.117982	0.022997	1254	1770	5821	1261	587	15	2.62	1.72
Configuration	C211_FW	1665	5929	16107	0.083988	0.064990	0.018998	1290	1356	3214	1297	368	7	1.58	0.92
Configuration	C209_FC	1922	4805	11802	0.149978	0.137979	0.011999	1274	1931	5626	1278	644	11	16.80	7.82
Configuration	C638_FKA	1787	7612	23876	0.169975	0.103985	0.065990	1248	1084	23471	1251	536	15	3.03	19.89
Configuration	C230_FR	1808	4767	12892	0.121981	0.105983	0.015998	1270	1770	5845	1272	536	15	6.86	4.51
Configuration	C168_FW	1909	7477	29124	0.237964	0.184972	0.052992	1173	2468	7600	1186	723	22	400.95	3700
Configuration	C203_FS	1931	6275	18018	0.171974	0.151977	0.019997	1235	2058	6601	1246	685	18	147.30	3700
Configuration	C140_FV	1843	8056	33705	0.187972	0.149978	0.037994	1162	2117	6521	1172	671	15	13.01	14.27
Configuration	C210_FS	1990	7982	29039	?	?	?	?	?	?	?	?	?	3700	3700
Configuration	C210_FVF	1934	3985	10693	0.143978	0.128981	0.014997	1297	1486	5088	1297	637	17	1.80	1.11
Configuration	C202_FS	1990	8883	37292	0.263960	0.225966	0.037994	1134	2810	9097	1149	841	13	3438.67	3700
Configuration	C208_FA	1876	7219	29021	0.186972	0.158976	0.027996	1180	2851	8582	1193	683	13	201.14	3700
Configuration	C202_FW	2038	11342	47534	0.326950	0.264960	0.061990	1097	3455	10431	1114	924	12	2973.92	3700
Configuration	C638_FKB	1784	3774	7581	0.470928	0.287956	0.182972	1261	997	23162	1263	521	13	5.99	2.08
Configuration	D1119_M23	1414	1997	3590	0.021997	0.021997	0	1358	76	202	1358	56	4	0.95	0.30
Configuration	C203_FCL	1914	5225	12762	0.437933	0.398939	0.038994	1269	1831	5866	1273	641	15	32.81	6.08
Configuration	C140_FC	1828	5451	14572	0.139979	0.120982	0.018997	1213	1777	5784	1223	605	11	4.90	1.82
Configuration	C250_FW	1465	2356	3972	0.022996	0.021996	0.001000	1310	162	350	1310	155	4	0.90	0.29
Configuration	C208_FC	1922	7518	33439	0.212968	0.183972	0.028996	1159	2978	9033	1172	750	12	613.54	3700
Configuration	C209_FA	1885	4093	10283	0.130980	0.120982	0.009998	1267	1591	4944	1268	617	12	2.43	1.12
Configuration	C220_FW	1932	6631	22758	0.197970	0.166975	0.030995	1201	2097	6740	1212	720	15	398.65	3700
Configuration	C140_FW	1841	6306	19770	0.172974	0.142979	0.029995	1165	2019	6443	1171	670	16	28.70	7.74
Configuration	C250_FV	1465	2356	3972	0.067990	0.065990	0.002000	1310	162	350	1310	155	4	0.99	0.30
Configuration	C211_FS	1635	3662	7661	0.149977	0.139979	0.009998	1333	425	1139	1340	295	8	1.15	0.32
Random	wff.3.150.525	150	525	1575	0.049993	0.048993	0.001000	0	525	1575	0	150	0	358.98	382.20
Random	wff.3.100.150	100	150	450	0.001999	0.001999	0	0	150	450	0	100	0	3043.48	3700
Random	wff.4.100.500	100	500	2000	?	?	?	?	?	?	?	?	?	3700	3700
Random	uf250-024	250	1065	3195	6.782968	6.782968	0	219	30	60	221	29	6	7.72	7.05
Random	uf250-026	250	1065	3195	4.298346	4.298346	0	218	29	60	218	32	3	5.18	4.52
Random	uf250-095	250	1065	3195	50.458329	50.457329	0.001000	2	1043	3120	2	248	0	75.32	78.36
Random	uf250-075	250	1065	3195	9.401570	9.399571	0.001999	41	711	2003	100	150	0	9.72	9.91
Random	uf250-051	250	1065	3195	5.246202	5.240203	0.005999	171	130	301	190	60	75	6.19	5.45
Random	uf250-015	250	1065	3195	11.387268	11.386269	0.000999	14	932	2743	14	236	0	13.47	11.98
Random	uf250-014	250	1065	3195	9.372575	9.368575	0.004000	91	410	1068	127	123	12	10.34	9.66
Random	uf250-062	250	1065	3195	3.819419	3.819419	0	208	41	85	209	41	2	4.70	3.97
Random	uf250-09	250	1065	3195	4.418328	4.412329	0.005999	169	129	294	183	67	68	5.32	4.90
Random	uf250-060	250	1065	3195	7.948791	7.947791	0.001000	187	98	214	187	63	5	8.86	8.19
Random	uf250-038	250	1065	3195	11.046320	11.044321	0.001999	196	74	161	203	47	38	11.97	11.42
Random	uf250-017	250	1065	3195	3.928402	3.925403	0.002999	156	156	363	170	80	35	4.82	4.22
Random	uf250-081	250	1065	3195	47.183826	47.182827	0.000999	13	929	2731	13	237	0	51.00	49.03
Random	uf250-094	250	1065	3195	11.593237	11.590238	0.002999	196	67	138	201	49	61	11.76	11.64
Random	uf250-030	250	1065	3195	13.166998	13.163998	0.003000	104	352	884	125	125	8	14.05	38.82
Random	uf250-039	250	1065	3195	10.955334	10.954334	0.001000	21	873	2545	21	229	0	12.40	11.24
Random	uf250-055	250	1065	3195	20.190930	20.189930	0.001000	17	907	2640	17	233	0	22.01	20.92
Random	uf250-078	250	1065	3195	16.236531	16.235531	0.001000	30	814	2332	30	220	0	17.44	16.37
Random	uf250-090	250	1065	3195	5.883105	5.879106	0.003999	134	216	500	150	100	31	6.82	6.25
Random	uf250-058	250	1065	3195	14.427806	14.420807	0.006999	75	482	1266	160	90	10	15.35	15.07
Random	uf250-054	250	1065	3195	4.196362	4.196362	0	240	2	4	240	10	0	5.14	4.52
Random	uf250-08	250	1065	3195	18.777145	18.776145	0.001000	26	834	2418	26	224	0	19.96	19.34
Random	uf250-070	250	1065	3195	5.601148	5.598148	0.003000	141	206	469	158	92	24	6.49	5.94
Random	uf250-041	250	1065	3195	2.321647	2.318647	0.003000	167	133	290	176	74	34	3.16	2.52
Random	uf250-043	250	1065	3195	4.765275	4.764275	0.001000	221	18	36	221	29	2	5.72	14.45
Random	uf250-037	250	1065	3195	25.563113	25.562113	0.001000	0	1065	3195	0	250	0	92.06	105.97
Random	uf250-076	250	1065	3195	7.660835	7.660835	0	212	35	73	213	37	2	8.55	8.22

	B+E(Σ, 100)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
c1908.isc	0.036995	0.028996	0.007999	710	60	226	716	35	710	0.82	0.30
c1355.isc	0.048992	0.044993	0.003999	514	0	0	514	41	514	0.81	0.47
s953.bench	0.017997	0.008998	0.008999	394	2	4	394	23	394	0.75	0.44
s820.bench	0.011998	0.006998	0.005000	289	0	0	289	23	289	0.90	0.23
s838.1.bench	0.021996	0.013997	0.007999	446	0	0	446	66	446	0.80	0.30
s1488.bench	0.033994	0.015997	0.017997	653	0	0	653	14	653	0.80	0.30
s1494.bench	0.032994	0.015997	0.016997	647	0	0	647	14	647	0.78	0.36
s1196.bench	0.022996	0.013997	0.008999	529	0	0	529	31	529	0.86	0.29
s510.bench	0.006998	0.003999	0.002999	211	0	0	211	25	211	0.83	0.34
s526.bench	0.004999	0.002999	0.002000	193	0	0	193	24	193	0.27	0.34
s713.bench	0.009998	0.007998	0.002000	393	0	0	393	54	377	0.40	0.41
s526n.bench	0.004999	0.002999	0.002000	194	0	0	194	24	194	0.82	0.27
s832.bench	0.012998	0.006998	0.006000	287	0	0	287	23	287	0.90	0.36
s444.bench	0.003999	0.002999	0.001000	181	0	0	181	24	180	0.76	0.35
s400.bench	0.003999	0.001999	0.002000	164	0	0	164	25	164	0.82	0.41
s641.bench	0.009998	0.006998	0.003000	379	0	0	379	54	379	0.85	0.26
s420.1.bench	0.005999	0.003999	0.002000	218	0	0	218	34	218	0.91	0.32
s1423.bench	0.036995	0.032995	0.004000	655	21	104	656	92	655	0.81	0.33
s1238.bench	0.024996	0.014997	0.009999	508	0	0	508	31	508	0.86	0.48
C169_FW	0.008998	0.008998	0	1349	52	107	1349	62	2	0.73	0.27
C210_FW	?	?	?	?	?	?	?	?	?	3700	3700
D1119_M20	0.005999	0.005999	0	1356	83	217	1356	44	2	0.79	0.40
C169_FV	0.008998	0.008998	0	1349	52	107	1349	62	2	0.80	0.29
C170_FR	0.238964	0.154977	0.083987	1221	4666	19582	1228	646	12	16.68	13.56
C220_FV	0.203969	0.168975	0.034994	1202	2160	7327	1212	721	21	323.54	181.78
C638_FVK	0.445932	0.263960	0.181972	1286	705	22419	1287	474	16	2.55	0.97
C163_FW	0.390940	0.335949	0.054991	1245	1278	4895	1253	562	24	2.99	0.58
C171_FR	0.255961	0.237964	0.017997	1297	1495	3031	1299	459	10	2.56	0.86
C129_FR	0.551916	0.478927	0.072989	1180	2589	7701	1185	703	20	458.67	11.14
C203_FW	0.187972	0.168975	0.018997	1284	1908	6096	1293	737	20	73.13	21.12
C215_FC	0.139979	0.117982	0.021997	1254	1770	5821	1261	587	15	2.59	1.77
C211_FW	0.083988	0.065990	0.017998	1290	1356	3214	1297	368	7	1.54	0.90
C209_FC	0.146978	0.134980	0.011998	1274	1931	5626	1278	644	11	16.84	7.79
C638_FKA	0.173974	0.107984	0.065990	1248	1084	23471	1251	536	15	2.91	20.07
C230_FR	0.120982	0.104984	0.015998	1270	1770	5845	1272	536	15	6.77	4.58
C168_FW	0.236964	0.188972	0.047992	1173	2468	7600	1186	723	22	405.51	3700
C203_FS	0.173974	0.150977	0.022997	1237	1905	6095	1247	684	20	55.28	20.82
C140_FV	0.192971	0.153977	0.038994	1162	2117	6521	1172	671	15	12.75	14.44
C210_FS	0.248962	0.205969	0.042993	1159	2824	8714	1175	815	15	1488.55	321.26
C210_FVF	0.144978	0.129980	0.014998	1297	1486	5088	1297	637	17	1.66	1.16
C202_FS	0.261960	0.222966	0.038994	1134	2810	9101	1150	840	13	3410.54	3700
C208_FA	0.546917	0.465929	0.080988	1180	2851	8582	1193	683	13	574.72	3700
C202_FW	?	?	?	?	?	?	?	?	?	3700	3700
C638_FKB	0.165974	0.101984	0.063990	1261	997	23162	1263	521	13	2.49	1.91
D1119_M23	0.006998	0.006998	0	1358	76	202	1358	56	4	0.72	0.21
C203_FCL	0.146978	0.133980	0.012998	1269	1831	5866	1273	641	15	11.78	6.08
C140_FC	0.138979	0.120982	0.017997	1213	1777	5784	1223	605	11	4.78	2.08
C250_FW	0.023996	0.022996	0.001000	1310	162	350	1310	155	4	0.93	0.60
C208_FC	0.621905	0.535918	0.085987	1159	2978	9033	1172	750	12	1774.17	3700
C209_FA	0.136980	0.125981	0.010999	1267	1591	4944	1268	617	12	1.78	0.84
C220_FW	0.199970	0.167975	0.031995	1201	2097	6740	1212	720	15	399.60	3700
C140_FW	0.171974	0.142979	0.028995	1165	2019	6443	1171	670	16	28.51	7.78
C250_FV	0.022997	0.021997	0.001000	1310	162	350	1310	155	4	0.89	0.24
C211_FS	0.051992	0.047992	0.004000	1333	425	1139	1340	295	8	0.82	0.27
wff.3.150.525	0.022996	0.021996	0.001000	0	525	1575	0	150	0	130.29	381.33
wff.3.100.150	0.000999	0.000999	0	0	150	450	0	100	0	3057.27	3700
wff.4.100.500	?	?	?	?	?	?	?	?	?	3700	3700
uf250-024	6.727977	6.727977	0	219	30	60	221	29	6	7.48	7.03
uf250-026	4.376334	4.376334	0	218	29	60	218	32	3	5.14	4.54
uf250-095	57.541252	57.540252	0.001000	2	1043	3120	2	248	0	82.61	86.22
uf250-075	9.572544	9.568545	0.003999	42	709	2002	111	139	1	10.37	9.57
uf250-051	5.185211	5.180212	0.004999	171	130	301	190	60	75	5.95	5.69
uf250-015	12.991025	12.990025	0.001000	14	932	2743	15	235	0	14.95	13.69
uf250-014	9.147609	9.143609	0.004000	91	410	1068	127	123	12	9.92	9.67
uf250-062	3.733432	3.733432	0	208	41	85	209	41	2	4.49	4.05
uf250-09	4.563306	4.557307	0.005999	169	129	294	183	67	68	5.37	4.95
uf250-060	7.812812	7.811812	0.001000	187	98	214	187	63	5	8.56	8.14
uf250-038	11.153304	11.152304	0.001000	196	74	161	203	47	38	11.93	11.43
uf250-017	3.949399	3.945400	0.003999	156	156	363	170	80	35	4.78	4.17
uf250-081	51.794126	51.793126	0.001000	13	929	2731	14	236	0	56.28	53.23
uf250-094	11.135307	11.132307	0.003000	196	67	138	201	49	61	11.22	11.55
uf250-030	13.132003	13.128004	0.003999	104	352	884	125	125	8	13.29	13.67
uf250-039	10.818355	10.816355	0.002000	21	873	2545	64	186	0	12.12	10.95
uf250-055	21.680704	21.679704	0.001000	17	907	2640	26	224	0	23.33	65.76
uf250-078	17.088402	17.086402	0.002000	30	814	2332	80	170	0	17.69	17.47
uf250-090	5.959094	5.955094	0.004000	134	216	500	150	100	31	6.38	6.36
uf250-058	14.275829	14.268830	0.006999	75	482	1266	160	90	10	15.08	42.04
uf250-054	4.226357	4.226357	0	240	2	4	240	10	0	5.05	4.60
uf250-08	19.416048	19.415048	0.001000	26	834	2418	50	200	0	20.17	19.83
uf250-070	5.669138	5.666138	0.003000	141	206	469	158	92	24	6.47	5.91
uf250-041	2.348642	2.345643	0.002999	167	133	290	176	74	34	3.20	2.62
uf250-043	4.750277	4.749278	0.000999	221	18	36	221	29	2	5.67	5.73
uf250-037	30.003438	30.002438	0.001000	0	1065	3195	0	250	0	97.08	110.40
uf250-076	7.705828	7.705828	0	212	35	73	213	37	2	8.54	8.02

	B+E(Σ, 1000)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
c1908.isc	0.035995	0.027996	0.007999	710	60	226	716	35	710	0.94	0.13
c1355.isc	0.119981	0.112982	0.006999	462	304	1088	514	41	462	52.62	92.14
s953.bench	0.017997	0.007998	0.009999	394	2	4	394	23	394	0.73	0.20
s820.bench	0.012998	0.006998	0.006000	289	0	0	289	23	289	0.86	0.22
s838.1.bench	0.021996	0.013997	0.007999	446	0	0	446	66	446	0.70	0.23
s1488.bench	0.033994	0.016997	0.016997	653	0	0	653	14	653	0.86	0.29
s1494.bench	0.032994	0.014997	0.017997	647	0	0	647	14	647	0.69	0.23
s1196.bench	0.023996	0.014997	0.008999	529	0	0	529	31	529	0.83	0.67
s510.bench	0.005999	0.002999	0.003000	211	0	0	211	25	211	0.63	0.63
s526.bench	0.004999	0.002999	0.002000	193	0	0	193	24	193	0.76	0.23
s713.bench	0.008998	0.006998	0.002000	393	0	0	393	54	377	0.90	0.22
s526n.bench	0.004999	0.002999	0.002000	194	0	0	194	24	194	0.61	0.16
s832.bench	0.013997	0.007998	0.005999	287	0	0	287	23	287	0.75	0.18
s444.bench	0.002999	0.001999	0.001000	181	0	0	181	24	180	0.88	0.21
s400.bench	0.002999	0.001999	0.001000	164	0	0	164	25	164	0.71	0.22
s641.bench	0.008998	0.006998	0.002000	379	0	0	379	54	379	0.85	0.21
s420.1.bench	0.006998	0.003999	0.002999	218	0	0	218	34	218	0.67	0.20
s1423.bench	0.036995	0.032995	0.004000	655	21	104	656	92	655	0.76	0.24
s1238.bench	0.023996	0.013997	0.009999	508	0	0	508	31	508	0.97	0.16
C169_FW	0.008998	0.008998	0	1349	52	107	1349	62	2	0.65	0.25
C210_FW	?	?	?	?	?	?	?	?	?	3700	3700
D1119_M20	0.006998	0.005999	0.000999	1356	83	217	1356	44	2	0.81	0.17
C169_FV	0.006998	0.006998	0	1349	52	107	1349	62	2	0.65	0.17
C170_FR	0.237964	0.153977	0.084987	1221	4666	19582	1228	646	12	16.54	38.49
C220_FV	0.202969	0.167975	0.034994	1202	2160	7327	1212	721	21	322.43	181.35
C638_FVK	0.147978	0.086987	0.061991	1286	705	22419	1287	474	16	1.26	0.78
C163_FW	0.134980	0.115983	0.018997	1245	1278	4895	1253	562	24	1.38	0.48
C171_FR	0.086986	0.080987	0.005999	1297	1495	3031	1299	459	10	1.26	1.11
C129_FR	0.190971	0.164975	0.025996	1180	2589	7701	1185	703	20	162.29	11.34
C203_FW	0.193971	0.174974	0.018997	1284	1908	6096	1293	737	20	72.35	60.68
C215_FC	0.139979	0.118982	0.020997	1254	1770	5821	1261	587	15	2.40	1.56
C211_FW	0.082988	0.064990	0.017998	1290	1356	3214	1297	368	7	1.40	0.69
C209_FC	0.146978	0.133980	0.012998	1274	1931	5626	1278	644	11	16.64	7.61
C638_FKA	0.169975	0.103985	0.065990	1248	1084	23471	1251	536	15	2.92	19.76
C230_FR	0.121981	0.106983	0.014998	1270	1770	5845	1272	536	15	6.61	4.36
C168_FW	0.228965	0.183972	0.044993	1173	2468	7600	1186	723	22	401.15	3700
C203_FS	0.174973	0.150977	0.023996	1237	1905	6095	1247	684	20	54.83	20.69
C140_FV	0.188971	0.148978	0.039993	1162	2117	6521	1172	671	15	12.67	14.09
C210_FS	0.247963	0.206969	0.040994	1159	2824	8714	1175	815	15	1473.82	322.19
C210_FVF	0.145978	0.129981	0.015997	1297	1486	5088	1297	637	17	1.73	2.63
C202_FS	0.270959	0.230965	0.039994	1134	2810	9101	1150	840	13	3410.58	3700
C208_FA	0.185972	0.159976	0.025996	1180	2851	8582	1193	683	13	200.07	3700
C202_FW	0.329950	0.265960	0.063990	1097	3453	10426	1114	924	12	2868.32	3700
C638_FKB	0.161976	0.098985	0.062991	1261	997	23162	1263	521	13	2.36	1.81
D1119_M23	0.006998	0.006998	0	1358	76	202	1358	56	4	0.66	0.19
C203_FCL	0.155977	0.141979	0.013998	1269	1831	5866	1273	641	15	11.72	17.07
C140_FC	0.137979	0.119982	0.017997	1213	1777	5784	1223	605	11	4.89	1.74
C250_FW	0.021996	0.021996	0	1310	162	350	1310	155	4	0.65	0.17
C208_FC	0.213968	0.182972	0.030996	1159	2978	9033	1172	750	12	609.95	3700
C209_FA	0.134980	0.124981	0.009999	1267	1591	4944	1268	617	12	2.09	0.78
C220_FW	0.198970	0.167975	0.030995	1201	2097	6740	1212	720	15	396.49	3700
C140_FW	0.172974	0.142979	0.029995	1165	2019	6443	1171	670	16	28.34	7.64
C250_FV	0.023996	0.022996	0.001000	1310	162	350	1310	155	4	0.72	0.68
C211_FS	0.051992	0.047992	0.004000	1333	425	1139	1340	295	8	0.92	0.76
wff.3.150.525	0.022996	0.022996	0	0	525	1575	0	150	0	129.08	379.52
wff.3.100.150	?	?	?	?	?	?	?	?	?	3700	3700
wff.4.100.500	?	?	?	?	?	?	?	?	?	3700	3700
uf250-024	6.760972	6.760972	0	219	30	60	221	29	6	7.40	6.95
uf250-026	4.294347	4.294347	0	218	29	60	218	32	3	4.84	4.44
uf250-095	96.523326	96.522326	0.001000	2	1043	3120	2	248	0	121.57	130.85
uf250-075	9.279589	9.275589	0.004000	42	709	2002	111	139	1	10.01	10.00
uf250-051	5.181212	5.176213	0.004999	171	130	301	190	60	75	5.85	5.34
uf250-015	13.910885	13.908885	0.002000	14	932	2743	48	202	0	15.71	14.02
uf250-014	9.054623	9.050624	0.003999	91	410	1068	127	123	12	9.91	9.57
uf250-062	3.918404	3.917404	0.001000	208	41	85	209	41	2	4.68	4.00
uf250-09	4.519312	4.513313	0.005999	169	129	294	183	67	68	5.34	4.67
uf250-060	7.773818	7.773818	0	187	98	214	187	63	5	8.49	8.01
uf250-038	11.485253	11.483254	0.001999	196	74	161	203	47	38	12.18	11.37
uf250-017	3.928402	3.924403	0.003999	156	156	363	170	80	35	4.56	4.09
uf250-081	57.978185	57.977186	0.000999	13	929	2731	40	210	0	62.41	63.22
uf250-094	11.227293	11.223293	0.004000	196	67	138	201	49	61	11.87	11.62
uf250-030	13.350970	13.347970	0.003000	104	352	884	125	125	8	14.05	13.07
uf250-039	10.498404	10.497404	0.001000	21	873	2545	65	185	0	11.77	11.18
uf250-055	23.681399	23.680400	0.000999	17	907	2640	59	191	0	25.25	23.18
uf250-078	16.758452	16.756452	0.002000	30	814	2332	96	154	0	18.00	17.28
uf250-090	6.098072	6.095073	0.002999	134	216	500	150	100	31	6.72	6.11
uf250-058	14.193842	14.188842	0.005000	75	482	1266	160	90	10	14.85	14.28
uf250-054	4.212359	4.212359	0	240	2	4	240	10	0	4.86	4.81
uf250-08	19.200081	19.198081	0.002000	26	834	2418	55	195	0	20.32	20.06
uf250-070	5.532158	5.529159	0.002999	141	206	469	158	92	24	6.17	5.66
uf250-041	2.258656	2.256656	0.002000	167	133	290	176	74	34	2.34	2.42
uf250-043	4.767275	4.767275	0	221	18	36	221	29	2	4.92	4.90
uf250-037	74.999598	74.998598	0.001000	0	1065	3195	0	250	0	143.85	151.85
uf250-076	7.603844	7.602844	0.001000	212	35	73	213	37	2	8.23	8.41

	B+E(Σ, ∞)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#output	#input	#forget	Cachet	SharpSAT
c1908.isc	0.037994	0.028995	0.008999	710	60	226	716	35	710	0.56	1.02
c1355.isc	0.076988	0.070989	0.005999	461	304	1080	514	41	461	60.66	82.50
s953.bench	0.018997	0.008998	0.009999	394	2	4	394	23	394	0.53	1.00
s820.bench	0.013997	0.006998	0.006999	289	0	0	289	23	289	0.68	1.08
s838.1.bench	0.021996	0.014997	0.006999	446	0	0	446	66	446	0.84	0.52
s1488.bench	0.033994	0.014997	0.018997	653	0	0	653	14	653	0.52	0.71
s1494.bench	0.032994	0.014997	0.017997	647	0	0	647	14	647	0.68	1.00
s1196.bench	0.024996	0.015997	0.008999	529	0	0	529	31	529	0.83	0.05
s510.bench	0.005999	0.003999	0.002000	211	0	0	211	25	211	0.49	0.02
s526.bench	0.004999	0.002999	0.002000	193	0	0	193	24	193	0.62	0.08
s713.bench	0.009998	0.007998	0.002000	393	0	0	393	54	377	0.76	1.00
s526n.bench	0.004999	0.002999	0.002000	194	0	0	194	24	194	0.90	0.04
s832.bench	0.013997	0.007998	0.005999	287	0	0	287	23	287	0.58	1.00
s444.bench	0.004999	0.002999	0.002000	181	0	0	181	24	180	0.72	0.05
s400.bench	0.002999	0.001999	0.001000	164	0	0	164	25	164	0.86	0.05
s641.bench	0.008998	0.007998	0.001000	379	0	0	379	54	379	0.53	0.12
s420.1.bench	0.005999	0.003999	0.002000	218	0	0	218	34	218	0.60	0.97
s1423.bench	0.037994	0.032994	0.005000	655	21	104	656	92	655	0.71	1.05
s1238.bench	0.023996	0.014997	0.008999	508	0	0	508	31	508	0.75	0.98
C169_FW	0.008998	0.008998	0	1349	52	107	1349	62	2	0.85	1.02
C210_FW	?	?	?	?	?	?	?	?	?	3700	3700
D1119_M20	0.005999	0.004999	0.001000	1356	83	217	1356	44	2	0.50	0.05
C169_FV	0.008998	0.008998	0	1349	52	107	1349	62	2	0.65	0.97
C170_FR	0.237964	0.151977	0.085987	1221	4666	19582	1228	646	12	16.59	13.88
C220_FV	0.203969	0.169974	0.033995	1202	2160	7327	1212	721	21	322.97	181.73
C638_FVK	0.147978	0.085987	0.061991	1286	705	22419	1287	474	16	1.02	1.66
C163_FW	0.131980	0.114983	0.016997	1245	1278	4895	1253	562	24	1.33	1.32
C171_FR	0.087987	0.080988	0.006999	1297	1495	3031	1299	459	10	1.16	1.00
C129_FR	0.190971	0.164975	0.025996	1180	2589	7701	1185	703	20	162.90	11.58
C203_FW	0.190971	0.171974	0.018997	1284	1908	6096	1293	737	20	73.03	21.72
C215_FC	0.139979	0.117982	0.021997	1254	1770	5821	1261	587	15	2.32	2.38
C211_FW	0.081988	0.064990	0.016998	1290	1356	3214	1297	368	7	1.27	1.57
C209_FC	0.146977	0.134979	0.011998	1274	1931	5626	1278	644	11	16.57	8.24
C638_FKA	0.169975	0.103985	0.065990	1248	1084	23471	1251	536	15	2.86	19.96
C230_FR	0.122982	0.106984	0.015998	1270	1770	5845	1272	536	15	6.51	4.18
C168_FW	0.228966	0.181973	0.046993	1173	2468	7600	1186	723	22	402.79	3700
C203_FS	0.173973	0.150977	0.022996	1237	1905	6095	1247	684	20	54.93	21.60
C140_FV	0.184972	0.146978	0.037994	1162	2117	6521	1172	671	15	12.59	14.97
C210_FS	0.248962	0.206969	0.041993	1159	2824	8714	1175	815	15	1478.22	322.20
C210_FVF	0.144977	0.128980	0.015997	1297	1486	5088	1297	637	17	1.42	1.30
C202_FS	0.260961	0.223966	0.036995	1134	2810	9101	1150	840	13	3423.60	3700
C208_FA	0.184971	0.157975	0.026996	1180	2851	8582	1193	683	13	201.48	3700
C202_FW	0.341948	0.275958	0.065990	1097	3453	10426	1114	924	12	2897.17	3700
C638_FKB	0.161975	0.098984	0.062991	1261	997	23162	1263	521	13	2.56	2.60
D1119_M23	0.006998	0.006998	0	1358	76	202	1358	56	4	0.69	1.01
C203_FCL	0.148977	0.135979	0.012998	1269	1831	5866	1273	641	15	11.90	6.79
C140_FC	0.138978	0.120981	0.017997	1213	1777	5784	1223	605	11	4.60	2.52
C250_FW	0.023996	0.023996	0	1310	162	350	1310	155	4	0.60	0.13
C208_FC	0.211968	0.182972	0.028996	1159	2978	9033	1172	750	12	608.13	3700
C209_FA	0.135980	0.124981	0.010999	1267	1591	4944	1268	617	12	2.22	1.61
C220_FW	0.195970	0.164974	0.030996	1201	2097	6740	1212	720	15	398.59	3700
C140_FW	0.173974	0.144978	0.028996	1165	2019	6443	1171	670	16	28.31	8.47
C250_FV	0.023996	0.023996	0	1310	162	350	1310	155	4	0.55	1.02
C211_FS	0.050992	0.047992	0.003000	1333	425	1139	1340	295	8	0.75	1.04
wff.3.150.525	0.022996	0.022996	0	0	525	1575	0	150	0	130.02	380.88
wff.3.100.150	0.000999	0.000999	0	0	150	450	0	100	0	3140.79	3700
wff.4.100.500	?	?	?	?	?	?	?	?	?	3700	3700
uf250-024	6.739975	6.738975	0.001000	219	30	60	221	29	6	7.34	7.75
uf250-026	4.439325	4.438325	0.001000	218	29	60	218	32	3	4.97	5.27
uf250-095	232.984580	232.982581	0.001999	2	1043	3120	11	239	0	257.93	255.86
uf250-075	9.266591	9.262591	0.004000	42	709	2002	111	139	1	9.93	9.80
uf250-051	5.186211	5.181212	0.004999	171	130	301	190	60	75	5.72	5.58
uf250-015	13.926882	13.924883	0.001999	14	932	2743	48	202	0	15.95	14.12
uf250-014	9.267591	9.263591	0.004000	91	410	1068	127	123	12	9.78	9.32
uf250-062	3.768427	3.768427	0	208	41	85	209	41	2	4.32	4.25
uf250-09	4.410329	4.404330	0.005999	169	129	294	183	67	68	5.31	5.12
uf250-060	7.641838	7.641838	0	187	98	214	187	63	5	8.62	8.65
uf250-038	11.176301	11.175301	0.001000	196	74	161	203	47	38	11.66	12.07
uf250-017	3.916404	3.912405	0.003999	156	156	363	170	80	35	4.66	12.62
uf250-081	63.843294	63.841294	0.002000	13	929	2731	45	205	0	68.39	66.62
uf250-094	11.318279	11.315279	0.003000	196	67	138	201	49	61	12.12	12.19
uf250-030	13.213991	13.210991	0.003000	104	352	884	125	125	8	13.81	14.09
uf250-039	10.906341	10.904342	0.001999	21	873	2545	65	185	0	12.39	31.85
uf250-055	22.591565	22.589565	0.002000	17	907	2640	59	191	0	24.00	23.65
uf250-078	16.784448	16.782448	0.002000	30	814	2332	96	154	0	17.68	17.90
uf250-090	6.009086	6.005087	0.003999	134	216	500	150	100	31	6.83	5.90
uf250-058	14.350818	14.344819	0.005999	75	482	1266	160	90	10	14.92	14.81
uf250-054	4.361336	4.361336	0	240	2	4	240	10	0	4.88	13.38
uf250-08	19.814987	19.812987	0.002000	26	834	2418	55	195	0	20.65	20.77
uf250-070	5.565153	5.562154	0.002999	141	206	469	158	92	24	6.10	6.57
uf250-041	2.260656	2.258656	0.002000	167	133	290	176	74	34	2.75	6.74
uf250-043	4.737279	4.737279	0	221	18	36	221	29	2	5.62	5.72
uf250-037	314.021261	314.020261	0.001000	0	1065	3195	2	248	0	383.68	391.13
uf250-076	7.744822	7.744822	0	212	35	73	213	37	2	8.42	23.30

	Benchmark Information				B+E($\sum$, 10)										
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
Random	uf250-098	250	1065	3195	12.029171	12.027171	0.002000	58	590	1597	87	163	2	12.96	12.52
Random	uf250-02	250	1065	3195	4.611298	4.611298	0	209	49	109	210	40	10	5.47	5.39
Random	uf250-057	250	1065	3195	8.823658	8.820659	0.002999	136	215	506	150	100	19	8.93	9.79
Random	uf250-0100	250	1065	3195	10.045472	10.040473	0.004999	116	301	740	147	103	21	10.21	30.24
Random	uf250-091	250	1065	3195	13.829897	13.828897	0.001000	0	1065	3195	0	250	0	86.45	203.35
Random	uf250-01	250	1065	3195	35.446611	35.445611	0.001000	0	1065	3195	0	250	0	104.63	135.83
Random	uf250-036	250	1065	3195	4.129372	4.128372	0.001000	212	26	53	212	38	0	5.05	5.12
Random	uf250-096	250	1065	3195	4.992241	4.990241	0.002000	164	142	325	174	76	19	5.87	5.22
Random	uf250-071	250	1065	3195	12.141154	12.141154	0	230	9	18	230	20	0	13.12	12.59
Random	uf250-082	250	1065	3195	9.226597	9.222597	0.004000	143	193	471	164	86	40	10.10	9.52
Random	uf250-053	250	1065	3195	6.482014	6.481014	0.001000	153	176	403	163	87	13	7.44	6.64
Random	uf250-020	250	1065	3195	6.218054	6.218054	0	176	102	220	176	74	0	7.15	7.09
Random	uf250-084	250	1065	3195	64.316222	64.314222	0.002000	41	737	2047	77	173	0	65.41	62.44
Random	uf250-012	250	1065	3195	2.140674	2.138674	0.002000	97	342	839	111	139	5	3.08	6.74
Random	uf250-042	250	1065	3195	18.172237	18.171237	0.001000	15	923	2693	15	235	0	20.16	19.30
Random	uf250-046	250	1065	3195	9.096617	9.092617	0.004000	60	602	1656	157	93	9	9.15	9.52
Random	uf250-027	250	1065	3195	5.213207	5.212207	0.001000	153	156	353	162	88	9	6.07	15.70
Random	uf250-068	250	1065	3195	16.006566	16.005566	0.001000	29	819	2365	30	220	0	17.06	16.51
Random	uf250-089	250	1065	3195	27.106879	27.103880	0.002999	26	835	2402	28	222	0	28.87	9.90
Random	uf250-045	250	1065	3195	4.112374	4.110375	0.001999	211	45	94	215	35	35	5.00	4.44
Random	uf250-074	250	1065	3195	12.014173	12.012173	0.002000	44	716	2013	47	203	1	13.17	34.90
Random	uf250-066	250	1065	3195	18.009262	18.008262	0.001000	18	894	2614	18	232	0	19.73	18.52
Random	uf250-052	250	1065	3195	6.264047	6.262048	0.001999	182	94	206	191	59	38	7.12	6.77
Random	uf250-010	250	1065	3195	10.403418	10.399419	0.003999	85	459	1211	139	111	9	11.28	11.77
Random	uf250-087	250	1065	3195	12.521096	12.517097	0.003999	147	175	400	163	87	38	12.88	12.83
Random	uf250-093	250	1065	3195	2.890560	2.890560	0	221	30	61	221	29	0	3.30	3.30
Random	uf250-011	250	1065	3195	12.274134	12.274134	0	228	13	26	228	22	0	13.23	13.23
Random	uf250-031	250	1065	3195	23.419439	23.412440	0.006999	161	147	344	177	73	86	24.22	24.08
Random	uf250-063	250	1065	3195	12.264135	12.261136	0.002999	114	308	752	139	111	9	13.11	12.29
Random	uf250-03	250	1065	3195	19.359056	19.354057	0.004999	160	147	331	168	82	14	20.31	7.43
Random	uf250-067	250	1065	3195	2.903558	2.903558	0	199	54	115	200	50	5	3.84	3.14
Random	uf250-05	250	1065	3195	9.078619	9.074620	0.003999	189	82	171	196	54	73	10.03	10.24
Random	uf250-099	250	1065	3195	6.198057	6.197057	0.001000	187	85	184	192	58	8	7.22	6.87
Random	uf250-035	250	1065	3195	26.221013	26.220013	0.001000	4	1020	3046	4	246	0	42.81	118.23
Random	uf250-013	250	1065	3195	3.885409	3.884409	0.001000	182	95	198	182	68	9	4.73	4.10
Random	uf250-064	250	1065	3195	3.995392	3.994392	0.001000	18	908	2640	19	231	0	5.22	4.46
Random	uf250-056	250	1065	3195	22.200624	22.196625	0.003999	56	629	1730	122	128	5	23.13	22.92
Random	uf250-028	250	1065	3195	7.624840	7.620841	0.003999	170	124	273	182	68	42	8.59	8.07
Random	uf250-083	250	1065	3195	13.481950	13.480950	0.001000	24	857	2480	25	225	0	14.68	14.11
Random	uf250-034	250	1065	3195	7.332885	7.332885	0	223	12	25	223	27	0	8.20	7.62
Random	uf250-029	250	1065	3195	44.122292	44.122292	0	229	7	14	229	21	0	45.09	16.17
Random	uf250-033	250	1065	3195	42.797493	42.796493	0.001000	13	948	2798	13	237	0	44.98	42.36
Random	uf250-07	250	1065	3195	11.158303	11.158303	0	214	27	57	214	36	0	11.89	11.57
Random	uf250-061	250	1065	3195	2.419632	2.417632	0.002000	120	278	668	127	123	3	3.33	3.83
Random	uf250-016	250	1065	3195	13.159999	13.159999	0	14	933	2746	15	235	0	15.48	14.58
Random	uf250-097	250	1065	3195	5.589150	5.585150	0.004000	158	156	361	179	71	46	6.48	5.87
Random	uf250-077	250	1065	3195	8.204752	8.201753	0.002999	153	184	445	168	82	41	9.09	9.08
Random	uf250-032	250	1065	3195	11.565241	11.564241	0.001000	204	47	95	204	46	3	12.22	12.22
Random	uf250-025	250	1065	3195	25.696093	25.695093	0.001000	15	915	2687	16	234	0	28.14	25.96
Random	uf250-065	250	1065	3195	17.325366	17.321366	0.004000	117	297	713	152	98	29	18.25	17.13
Random	uf250-050	250	1065	3195	5.829113	5.824114	0.004999	140	201	466	164	86	47	6.73	5.91
Random	uf250-048	250	1065	3195	6.416024	6.413025	0.002999	93	369	941	137	113	11	7.30	6.96
Random	uf250-085	250	1065	3195	6.879954	6.878954	0.001000	23	869	2526	25	225	0	8.03	7.40
Random	uf250-044	250	1065	3195	13.279981	13.278981	0.001000	6	1007	2992	6	244	0	20.92	16.55
Random	uf250-022	250	1065	3195	12.182148	12.182148	0	222	17	34	222	28	1	13.05	13.10
Random	uf250-059	250	1065	3195	7.126916	7.123917	0.002999	149	168	377	164	86	33	7.98	7.37
Random	uf250-088	250	1065	3195	56.096472	56.095472	0.001000	16	921	2706	16	234	0	58.92	58.80
Random	uf250-072	250	1065	3195	7.513858	7.513858	0	225	17	37	225	25	0	8.41	2.79
Random	uf250-049	250	1065	3195	21.899670	21.898670	0.001000	3	1027	3069	3	247	0	49.24	39.24
Random	uf250-040	250	1065	3195	5.843111	5.837112	0.005999	119	275	685	148	102	33	6.74	6.20
Random	uf250-086	250	1065	3195	9.029627	9.029627	0	215	29	61	215	35	0	9.15	9.63
Random	uf250-06	250	1065	3195	26.231012	26.230012	0.001000	10	968	2865	10	240	0	30.12	28.46
Random	uf250-092	250	1065	3195	8.352730	8.350730	0.002000	149	150	349	153	97	16	9.27	8.44
Random	uf250-080	250	1065	3195	16.060559	16.053560	0.006999	180	100	216	189	61	45	16.94	5.77
Random	uf250-079	250	1065	3195	40.223885	40.221885	0.002000	31	803	2311	55	195	0	41.23	40.40
Random	uf250-047	250	1065	3195	24.629255	24.628255	0.001000	19	881	2558	19	231	0	25.81	25.44
Random	uf250-021	250	1065	3195	105.957891	105.956892	0.000999	0	1065	3195	0	250	0	219.50	296.19
Random	uf250-018	250	1065	3195	7.755820	7.753821	0.001999	180	100	217	184	66	28	8.60	8.05
Random	uf250-073	250	1065	3195	62.595484	62.594484	0.001000	6	1019	3032	6	244	0	77.31	70.29
Random	uf250-019	250	1065	3195	67.447747	67.445747	0.002000	5	1016	3030	5	245	0	125.12	41.45
Random	uf250-069	250	1065	3195	14.560786	14.557786	0.003000	66	571	1543	114	136	3	15.44	14.41
Random	uf250-04	250	1065	3195	30.266398	30.265398	0.001000	1	1053	3155	1	249	0	73.15	72.47
Random	uf250-023	250	1065	3195	7.369879	7.363880	0.005999	87	414	1060	148	102	19	8.25	7.87
Random	wff.3.75.315	75	315	945	0.000999	0.000999	0	64	11	22	65	10	29	0.85	0.33
BMC	bmc-ibm-7	8710	39774	101779	0.802878	0.573913	0.228965	8183	1471	4807	8421	289	2703	203.43	28.62
BMC	cnt06.shuffled	762	2469	6753	0.007999	0.007999	0	762	0	0	762	0	0	0.88	0.38
BMC	bmc-ibm-10	59056	323700	854093	8.124765	6.499012	1.625753	58385	1293	4217	58664	392	8437	9.18	9.55
BMC	cnt09.shuffled	9207	30678	83822	2.472624	2.467624	0.005000	9207	0	0	9207	0	0	3.34	3.30
BMC	bmc-ibm-11	32109	150027	394770	11.947184	10.524400	1.422784	30895	5208	17021	31701	408	10260	62.74	219.95
BMC	bmc-ibm-1	9685	55870	149914	2.528616	2.351642	0.176974	8459	1090	3587	8633	1052	2364	3.70	3.03
BMC	bmc-galileo-9	63624	326999	852078	39.263031	27.100880	12.162151	61849	8041	25490	63346	278	25806	43.79	60.75
BMC	bmc-ibm-13	13215	65728	174164	4.141370	4.042385	0.098985	13070	19	114	13070	145	2690	4.96	4.36
BMC	bmc-ibm-2	2810	11683	29407	0.055992	0.042994	0.012998	2723	55	144	2732	78	722	0.91	0.33
BMC	bmc-ibm-12	39598	194778	515536	5.562154	4.656292	0.905862	38946	1477	5072	39191	407	5337	7.03	6.63

	B+E($\sum$, 100)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
uf250-098	12.324126	12.322126	0.002000	58	590	1597	87	163	2	13.14	12.77
uf250-02	4.483318	4.483318	0	209	49	109	210	40	10	5.31	4.86
uf250-057	8.764667	8.761668	0.002999	136	215	506	150	100	19	9.56	9.40
uf250-0100	10.214447	10.210447	0.004000	116	301	740	147	103	21	10.69	10.37
uf250-091	17.799294	17.798294	0.001000	0	1065	3195	0	250	0	89.79	77.94
uf250-01	41.742654	41.741654	0.001000	0	1065	3195	0	250	0	109.81	138.76
uf250-036	4.124373	4.124373	0	212	26	53	212	38	0	4.89	4.40
uf250-096	4.987241	4.985242	0.001999	164	142	325	174	76	19	5.02	15.08
uf250-071	12.556091	12.556091	0	230	9	18	230	20	0	12.67	12.46
uf250-082	9.142610	9.139610	0.003000	143	193	471	164	86	40	9.95	9.45
uf250-053	6.451019	6.450019	0.001000	153	176	403	163	87	13	7.29	6.72
uf250-020	6.128068	6.128068	0	176	102	220	176	74	0	6.94	6.43
uf250-084	63.899285	63.896286	0.002999	44	734	2044	82	168	3	64.80	178.88
uf250-012	2.185667	2.183668	0.001999	97	342	839	111	139	5	3.02	2.45
uf250-042	20.195929	20.194929	0.001000	15	923	2693	23	227	0	22.07	20.99
uf250-046	9.134611	9.130611	0.004000	60	602	1656	157	93	9	9.90	26.55
uf250-027	5.208208	5.206208	0.002000	153	156	353	162	88	9	5.95	5.44
uf250-068	16.265527	16.262527	0.003000	30	818	2363	59	191	1	17.20	16.86
uf250-089	9.520552	9.517553	0.002999	27	834	2403	72	178	1	10.66	10.20
uf250-045	4.161367	4.160367	0.001000	211	45	94	215	35	35	4.99	4.28
uf250-074	11.813204	11.811204	0.002000	44	716	2012	63	187	1	12.85	12.19
uf250-066	20.111942	20.110942	0.001000	18	894	2614	23	227	0	21.68	20.58
uf250-052	5.896103	5.895103	0.001000	182	94	206	191	59	38	6.73	6.23
uf250-010	10.354425	10.350426	0.003999	85	459	1211	139	111	9	11.16	10.73
uf250-087	12.519096	12.515097	0.003999	147	175	400	163	87	38	13.28	13.19
uf250-093	2.968548	2.968548	0	221	30	61	221	29	0	3.83	3.60
uf250-011	11.995176	11.995176	0	228	13	26	228	22	0	12.93	36.93
uf250-031	24.347298	24.339299	0.007999	161	147	344	177	73	86	25.16	24.60
uf250-063	11.868195	11.865196	0.002999	114	308	752	139	111	9	11.96	12.27
uf250-03	6.563002	6.561002	0.002000	160	147	331	168	82	14	6.86	6.84
uf250-067	2.892560	2.892560	0	199	54	115	200	50	5	3.71	3.10
uf250-05	27.021892	27.011894	0.009998	189	82	171	196	54	73	27.88	9.69
uf250-099	6.020084	6.019084	0.001000	187	85	184	192	58	8	6.76	6.55
uf250-035	29.361536	29.360536	0.001000	4	1020	3046	4	246	0	47.03	46.03
uf250-013	3.782424	3.781425	0.000999	182	95	198	182	68	9	3.84	4.22
uf250-064	4.314344	4.312344	0.002000	18	908	2640	47	203	0	4.74	4.81
uf250-056	22.565569	22.561570	0.003999	56	629	1730	122	128	5	22.72	23.15
uf250-028	7.191906	7.188907	0.002999	170	124	273	182	68	42	7.39	7.57
uf250-083	13.949879	13.947879	0.002000	24	857	2478	60	190	0	15.16	14.41
uf250-034	7.281892	7.281892	0	223	12	25	223	27	0	8.02	7.44
uf250-029	14.911733	14.911733	0	229	7	14	229	21	0	15.87	15.38
uf250-033	42.994463	42.993464	0.000999	13	948	2798	25	225	0	45.32	45.41
uf250-07	11.073316	11.073316	0	214	27	57	214	36	0	11.24	33.07
uf250-061	2.427630	2.425631	0.001999	120	278	668	127	123	3	2.66	2.79
uf250-016	14.337820	14.336820	0.001000	14	933	2746	34	216	0	16.62	14.94
uf250-097	5.682136	5.678136	0.004000	158	156	361	179	71	46	6.42	5.79
uf250-077	8.327733	8.324734	0.002999	153	184	445	168	82	41	9.13	8.59
uf250-032	33.903846	33.902846	0.001000	204	47	95	204	46	3	34.02	12.06
uf250-025	27.485821	27.484821	0.001000	15	915	2687	16	234	0	29.38	27.91
uf250-065	16.743454	16.738455	0.004999	117	297	713	152	98	29	17.62	16.99
uf250-050	5.671137	5.665138	0.005999	140	201	466	164	86	47	6.48	5.81
uf250-048	6.582999	6.578999	0.004000	93	369	941	137	113	11	7.47	7.02
uf250-085	7.273894	7.271894	0.002000	23	869	2526	57	193	0	8.39	7.64
uf250-044	16.181540	16.180540	0.001000	6	1007	2992	6	244	0	23.63	19.12
uf250-022	12.812052	12.812052	0	222	17	34	222	28	1	13.59	12.55
uf250-059	6.937945	6.934945	0.003000	149	168	377	164	86	33	7.76	7.45
uf250-088	62.068564	62.067564	0.001000	16	921	2706	18	232	0	64.68	63.64
uf250-072	2.665594	2.665594	0	225	17	37	225	25	0	3.46	2.78
uf250-049	27.251857	27.250857	0.001000	3	1027	3069	3	247	0	53.85	43.66
uf250-040	6.099072	6.094073	0.004999	119	275	685	148	102	33	6.89	17.30
uf250-086	9.541549	9.541549	0	215	29	61	215	35	0	10.29	10.13
uf250-06	29.726480	29.725481	0.000999	10	968	2865	13	237	0	33.51	30.99
uf250-092	8.314735	8.312736	0.001999	149	150	349	153	97	16	8.61	8.58
uf250-080	5.627144	5.625144	0.002000	180	100	216	189	61	45	6.14	5.73
uf250-079	39.185042	39.181043	0.003999	32	802	2308	110	140	1	40.08	40.19
uf250-047	73.891767	73.884768	0.006999	19	881	2558	88	162	0	75.00	26.37
uf250-021	118.810937	118.809938	0.000999	0	1065	3195	0	250	0	242.92	315.19
uf250-018	7.823810	7.821810	0.002000	180	100	217	184	66	28	8.54	7.84
uf250-073	67.048807	67.047807	0.001000	6	1019	3032	6	244	0	81.80	74.55
uf250-019	26.175020	26.174020	0.001000	5	1016	3030	5	245	0	46.20	43.84
uf250-069	14.064861	14.061862	0.002999	66	571	1543	114	136	3	14.87	41.40
uf250-04	36.422462	36.421463	0.000999	1	1053	3155	1	249	0	79.50	74.35
uf250-023	7.342883	7.337884	0.004999	87	414	1060	148	102	19	8.15	7.68
wff.3.75.315	0.005999	0.003999	0.002000	64	11	22	65	10	29	0.91	0.29
bmc-ibm-7	2.403635	1.773731	0.629904	8213	1386	4586	8442	268	2733	248.57	29.01
cnt06.shuffled	0.007998	0.007998	0	762	0	0	762	0	0	0.88	0.37
bmc-ibm-10	8.183756	6.569001	1.614755	58415	1174	3828	58679	377	8467	9.06	9.39
cnt09.shuffled	2.567610	2.562611	0.004999	9207	0	0	9207	0	0	3.36	2.84
bmc-ibm-11	13.941881	12.418112	1.523769	30922	5078	16653	31809	300	10287	138.55	210.81
bmc-ibm-1	2.542614	2.369640	0.172974	8499	869	2799	8649	1036	2404	3.51	2.91
bmc-galileo-9	40.305873	28.533662	11.772211	62358	5224	16810	63455	169	26315	41.61	40.25
bmc-ibm-13	4.174366	4.074381	0.099985	13070	19	114	13070	145	2690	4.40	4.83
bmc-ibm-2	0.053992	0.041994	0.011998	2723	55	144	2732	78	722	0.31	0.35
bmc-ibm-12	5.701133	4.914253	0.786880	39098	558	1697	39209	389	5489	6.55	6.81

	B+E($\sum$, 1000)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
uf250-098	11.773210	11.770210	0.003000	58	590	1597	87	163	2	12.43	11.95
uf250-02	4.497316	4.497316	0	209	49	109	210	40	10	5.13	5.19
uf250-057	8.801661	8.798662	0.002999	136	215	506	150	100	19	9.47	9.53
uf250-0100	10.256440	10.251441	0.004999	116	301	740	147	103	21	10.94	10.71
uf250-091	49.737438	49.736438	0.001000	0	1065	3195	0	250	0	120.43	110.29
uf250-01	81.468614	81.467615	0.000999	0	1065	3195	0	250	0	150.78	179.83
uf250-036	4.102376	4.102376	0	212	26	53	212	38	0	4.78	4.37
uf250-096	4.923251	4.921251	0.002000	164	142	325	174	76	19	5.84	5.69
uf250-071	12.229140	12.229140	0	230	9	18	230	20	0	12.91	12.99
uf250-082	9.112614	9.108615	0.003999	143	193	471	164	86	40	9.72	9.46
uf250-053	6.443020	6.441020	0.002000	153	176	403	163	87	13	7.30	6.75
uf250-020	6.041081	6.041081	0	176	102	220	176	74	0	6.65	6.18
uf250-084	64.785151	64.782151	0.003000	44	734	2044	82	168	3	65.70	64.38
uf250-012	2.169670	2.166670	0.003000	97	342	839	111	139	5	2.84	2.38
uf250-042	20.110942	20.107943	0.002999	16	922	2691	64	186	1	22.08	21.13
uf250-046	9.138610	9.134611	0.003999	60	602	1656	157	93	9	9.99	9.34
uf250-027	5.204208	5.203208	0.001000	153	156	353	162	88	9	6.21	5.40
uf250-068	16.404506	16.401506	0.003000	31	818	2367	60	190	2	17.26	16.72
uf250-089	9.378574	9.375574	0.003000	29	833	2410	77	173	3	10.32	10.05
uf250-045	4.153368	4.152368	0.001000	211	45	94	215	35	35	4.61	4.37
uf250-074	11.581239	11.579239	0.002000	44	716	2012	63	187	1	12.36	12.49
uf250-066	19.615018	19.614018	0.001000	18	894	2613	46	204	0	21.07	20.66
uf250-052	6.130068	6.128068	0.002000	182	94	206	191	59	38	6.88	6.50
uf250-010	10.371423	10.368423	0.003000	85	459	1211	139	111	9	11.31	11.20
uf250-087	12.504099	12.501099	0.003000	147	175	400	163	87	38	13.02	12.65
uf250-093	2.919556	2.919556	0	221	30	61	221	29	0	3.48	3.06
uf250-011	12.757060	12.757060	0	228	13	26	228	22	0	13.44	12.68
uf250-031	24.564265	24.555267	0.008998	161	147	344	177	73	86	25.23	24.36
uf250-063	11.829201	11.826202	0.002999	114	308	752	139	111	9	12.46	11.99
uf250-03	6.357033	6.356033	0.001000	160	147	331	168	82	14	7.01	6.58
uf250-067	2.912557	2.911557	0.001000	199	54	115	200	50	5	3.55	3.06
uf250-05	9.160607	9.157607	0.003000	189	82	171	196	54	73	9.86	10.10
uf250-099	5.893104	5.892104	0.001000	187	85	184	192	58	8	6.65	6.95
uf250-035	52.318046	52.318046	0	4	1020	3046	4	246	0	69.74	67.66
uf250-013	3.779425	3.779425	0	182	95	198	182	68	9	4.57	3.97
uf250-064	4.305345	4.303345	0.002000	19	907	2642	48	202	1	5.48	5.12
uf250-056	22.652556	22.649556	0.003000	56	629	1730	122	128	5	23.39	23.00
uf250-028	7.360880	7.358881	0.001999	170	124	273	182	68	42	8.08	7.44
uf250-083	13.964877	13.961877	0.003000	25	856	2482	67	183	1	14.90	14.51
uf250-034	7.308888	7.308888	0	223	12	25	223	27	0	7.91	8.09
uf250-029	15.403658	15.403658	0	229	7	14	229	21	0	15.45	16.34
uf250-033	43.724352	43.723353	0.000999	13	948	2798	38	212	0	45.40	46.57
uf250-07	11.128308	11.128308	0	214	27	57	214	36	0	11.79	11.21
uf250-061	7.395875	7.389876	0.005999	120	278	668	127	123	3	8.15	2.59
uf250-016	14.391812	14.390812	0.001000	14	933	2746	48	202	0	16.57	15.28
uf250-097	5.487165	5.483166	0.003999	158	156	361	179	71	46	6.41	5.78
uf250-077	8.106767	8.103768	0.002999	153	184	445	168	82	41	8.71	8.16
uf250-032	33.902846	33.901846	0.001000	204	47	95	204	46	3	34.63	11.67
uf250-025	29.464520	29.463520	0.001000	15	915	2687	44	206	0	31.91	30.59
uf250-065	16.903430	16.899430	0.004000	117	297	713	152	98	29	17.77	16.75
uf250-050	5.820115	5.814116	0.005999	140	201	466	164	86	47	6.52	5.66
uf250-048	6.462017	6.459018	0.002999	93	369	941	137	113	11	7.06	6.83
uf250-085	7.430870	7.428870	0.002000	23	869	2526	60	190	0	8.37	7.34
uf250-044	24.811228	24.810228	0.001000	6	1007	2992	25	225	0	32.52	28.22
uf250-022	12.530095	12.530095	0	222	17	34	222	28	1	13.21	13.28
uf250-059	6.873955	6.870955	0.003000	149	168	377	164	86	33	7.78	7.23
uf250-088	62.092560	62.088561	0.003999	18	919	2713	87	163	2	64.46	62.29
uf250-072	2.580608	2.579608	0.001000	225	17	37	225	25	0	3.18	2.76
uf250-049	53.637845	53.636845	0.001000	3	1027	3069	3	247	0	80.87	71.43
uf250-040	6.069077	6.064078	0.004999	119	275	685	148	102	33	6.98	6.00
uf250-086	26.953903	26.953903	0	215	29	61	215	35	0	27.81	9.45
uf250-06	31.444219	31.443219	0.001000	10	968	2865	39	211	0	35.23	33.73
uf250-092	8.267743	8.265743	0.002000	149	150	349	153	97	16	8.89	8.47
uf250-080	5.479167	5.477167	0.002000	180	100	216	189	61	45	6.09	5.66
uf250-079	41.945623	41.941623	0.004000	32	802	2308	110	140	1	42.69	43.47
uf250-047	25.622104	25.618105	0.003999	20	880	2561	91	159	1	26.95	25.61
uf250-021	195.136334	195.136334	0	0	1065	3195	0	250	0	315.03	369.72
uf250-018	7.838808	7.837808	0.001000	180	100	217	184	66	28	8.50	8.25
uf250-073	240.168489	240.165490	0.002999	6	1019	3032	10	240	0	282.34	95.94
uf250-019	32.310088	32.309088	0.001000	5	1016	3030	5	245	0	52.81	50.66
uf250-069	13.792903	13.790903	0.002000	66	571	1543	114	136	3	14.48	15.21
uf250-04	70.366302	70.365302	0.001000	1	1053	3155	1	249	0	113.65	108.74
uf250-023	7.680832	7.674833	0.005999	87	414	1060	148	102	19	8.31	7.45
wff.3.75.315	0.001999	0.001999	0	64	11	22	65	10	29	0.81	0.16
bmc-ibm-7	0.819876	0.604908	0.214968	8213	1386	4586	8442	268	2733	86.36	28.69
cnt06.shuffled	0.007999	0.006999	0.001000	762	0	0	762	0	0	0.63	0.31
bmc-ibm-10	8.051776	6.484015	1.567761	58415	1174	3828	58679	377	8467	8.97	9.39
cnt09.shuffled	2.430630	2.425631	0.004999	9207	0	0	9207	0	0	3.09	2.67
bmc-ibm-11	16.449499	14.742758	1.706741	30950	4993	16396	31837	272	10315	1051.37	267.27
bmc-ibm-1	2.538614	2.388637	0.149977	8499	885	2888	8652	1033	2404	3.30	2.81
bmc-galileo-9	38.625128	27.301850	11.323278	62358	5224	16810	63455	169	26315	39.73	41.36
bmc-ibm-13	4.134371	4.033387	0.100984	13070	19	114	13070	145	2690	4.86	5.12
bmc-ibm-2	0.054992	0.041994	0.012998	2723	55	144	2732	78	722	0.74	1.02
bmc-ibm-12	5.812117	5.051232	0.760885	39164	285	881	39221	377	5555	6.77	6.18

	B+E($\sum$, ∞)										
Name	time B + E	time B	time E	#elim	#cl	#lit	#output	#input	#forget	Cachet	SharpSAT
uf250-098	11.934185	11.933185	0.001000	58	590	1597	87	163	2	12.72	12.81
uf250-02	4.497316	4.497316	0	209	49	109	210	40	10	5.28	5.48
uf250-057	8.724673	8.721674	0.002999	136	215	506	150	100	19	9.29	9.45
uf250-0100	10.113462	10.109463	0.003999	116	301	740	147	103	21	10.67	10.78
uf250-091	250.952849	250.951849	0.001000	0	1065	3195	1	249	0	321.37	309.11
uf250-01	204.486913	204.485913	0.001000	0	1065	3195	1	249	0	272.81	302.32
uf250-036	4.156368	4.155368	0.001000	212	26	53	212	38	0	4.72	5.20
uf250-096	5.009238	5.009238	0	164	142	325	174	76	19	5.83	6.08
uf250-071	12.153152	12.153152	0	230	9	18	230	20	0	13.02	12.70
uf250-082	9.491557	9.487557	0.004000	143	193	471	164	86	40	9.99	9.62
uf250-053	6.573000	6.572000	0.001000	153	176	403	163	87	13	7.09	6.92
uf250-020	6.091074	6.091074	0	176	102	220	176	74	0	6.58	7.04
uf250-084	64.018267	64.015268	0.002999	44	734	2044	82	168	3	64.72	66.04
uf250-012	2.185667	2.182668	0.002999	97	342	839	111	139	5	2.73	7.24
uf250-042	20.658859	20.655859	0.003000	16	922	2691	64	186	1	22.70	21.90
uf250-046	9.250593	9.245594	0.004999	60	602	1656	157	93	9	9.85	10.08
uf250-027	5.281197	5.280197	0.001000	153	156	353	162	88	9	5.78	6.04
uf250-068	16.812444	16.809444	0.003000	31	818	2367	60	190	2	17.98	49.92
uf250-089	9.665530	9.662530	0.003000	29	833	2410	77	173	3	10.41	11.00
uf250-045	4.171365	4.169366	0.001999	211	45	94	215	35	35	5.01	4.23
uf250-074	11.929186	11.927186	0.002000	44	716	2012	63	187	1	12.75	13.00
uf250-066	19.893975	19.892975	0.001000	18	894	2613	46	204	0	21.27	22.26
uf250-052	5.896103	5.894103	0.002000	182	94	206	191	59	38	6.01	6.00
uf250-010	10.630383	10.627384	0.002999	85	459	1211	139	111	9	11.16	10.66
uf250-087	12.480102	12.476103	0.003999	147	175	400	163	87	38	13.06	13.40
uf250-093	2.904558	2.904558	0	221	30	61	221	29	0	3.39	2.96
uf250-011	12.308128	12.308128	0	228	13	26	228	22	0	12.90	12.60
uf250-031	23.776385	23.768386	0.007999	161	147	344	177	73	86	24.35	24.62
uf250-063	11.983178	11.981178	0.002000	114	308	752	139	111	9	12.53	12.95
uf250-03	6.359033	6.358033	0.001000	160	147	331	168	82	14	7.22	7.32
uf250-067	2.894559	2.894559	0	199	54	115	200	50	5	2.93	8.83
uf250-05	9.325582	9.322582	0.003000	189	82	171	196	54	73	9.45	10.50
uf250-099	5.952095	5.952095	0	187	85	184	192	58	8	6.49	6.95
uf250-035	62.971426	62.969427	0.001999	4	1020	3046	21	229	0	79.56	83.09
uf250-013	3.748430	3.747430	0.001000	182	95	198	182	68	9	3.88	3.79
uf250-064	4.363336	4.360337	0.002999	19	907	2642	48	202	1	5.46	4.57
uf250-056	22.475583	22.471583	0.004000	56	629	1730	122	128	5	23.53	22.63
uf250-028	7.511858	7.508858	0.003000	170	124	273	182	68	42	8.11	22.60
uf250-083	13.800901	13.796902	0.003999	25	856	2482	67	183	1	14.61	14.53
uf250-034	7.202904	7.202904	0	223	12	25	223	27	0	7.93	7.99
uf250-029	15.250681	15.249681	0.001000	229	7	14	229	21	0	15.89	16.54
uf250-033	44.999159	44.998159	0.001000	13	948	2798	38	212	0	47.11	44.73
uf250-07	11.054319	11.054319	0	214	27	57	214	36	0	11.58	12.01
uf250-061	2.422631	2.420632	0.001999	120	278	668	127	123	3	3.18	8.16
uf250-016	14.341819	14.339820	0.001999	14	933	2746	48	202	0	16.30	15.84
uf250-097	5.578151	5.574152	0.003999	158	156	361	179	71	46	6.12	6.31
uf250-077	8.436717	8.433717	0.003000	153	184	445	168	82	41	9.16	8.84
uf250-032	11.576240	11.575240	0.001000	204	47	95	204	46	3	12.37	33.86
uf250-025	29.227556	29.225557	0.001999	16	914	2690	45	205	1	31.22	30.46
uf250-065	16.741454	16.737455	0.003999	117	297	713	152	98	29	17.30	16.84
uf250-050	5.510162	5.504163	0.005999	140	201	466	164	86	47	6.04	17.29
uf250-048	6.450019	6.447019	0.003000	93	369	941	137	113	11	6.96	7.38
uf250-085	7.449867	7.447867	0.002000	23	869	2526	60	190	0	8.28	8.56
uf250-044	25.956054	25.955054	0.001000	6	1007	2992	27	223	0	33.26	29.48
uf250-022	12.185147	12.185147	0	222	17	34	222	28	1	12.74	13.73
uf250-059	7.038929	7.035930	0.002999	149	168	377	164	86	33	7.55	8.14
uf250-088	62.438507	62.435508	0.002999	18	919	2713	88	162	2	64.70	64.68
uf250-072	2.645597	2.645597	0	225	17	37	225	25	0	3.32	3.51
uf250-049	79.538908	79.537908	0.001000	3	1027	3069	4	246	0	106.42	269.35
uf250-040	6.099072	6.093073	0.005999	119	275	685	148	102	33	6.98	6.83
uf250-086	9.085618	9.085618	0	215	29	61	215	35	0	10.03	10.14
uf250-06	32.256096	32.254096	0.002000	10	968	2865	39	211	0	35.74	34.35
uf250-092	8.589694	8.587694	0.002000	149	150	349	153	97	16	9.30	9.31
uf250-080	5.537158	5.535158	0.002000	180	100	216	189	61	45	6.10	5.54
uf250-079	39.501994	39.497995	0.003999	32	802	2308	110	140	1	40.13	40.83
uf250-047	26.141025	26.137026	0.003999	20	880	2561	91	159	1	27.00	73.93
uf250-021	374.956997	374.955998	0.000999	0	1065	3195	1	249	0	495.99	570.02
uf250-018	7.722825	7.720826	0.001999	180	100	217	184	66	28	8.59	8.58
uf250-073	101.553561	101.551561	0.002000	6	1019	3032	30	220	0	115.89	109.59
uf250-019	43.957317	43.956317	0.001000	5	1016	3030	7	243	0	64.05	60.51
uf250-069	14.112854	14.109854	0.003000	66	571	1543	114	136	3	14.71	14.14
uf250-04	117.141191	117.140191	0.001000	1	1053	3155	3	247	0	160.50	155.91
uf250-023	7.420871	7.414872	0.005999	87	414	1060	148	102	19	8.27	8.31
wff.3.75.315	0.000999	0.000999	0	64	11	22	65	10	29	0.52	0.62
bmc-ibm-7	0.818875	0.603908	0.214967	8213	1386	4586	8442	268	2733	86.92	29.77
cnt06.shuffled	0.007999	0.007999	0	762	0	0	762	0	0	0.48	1.07
bmc-ibm-10	8.164759	6.567002	1.597757	58415	1174	3828	58679	377	8467	8.95	9.56
cnt09.shuffled	2.447627	2.442628	0.004999	9207	0	0	9207	0	0	3.03	3.53
bmc-ibm-11	16.736456	15.096705	1.639751	30942	4998	16400	31838	271	10307	132.08	749.57
bmc-ibm-1	2.527616	2.361641	0.165975	8500	884	2892	8652	1033	2405	3.11	3.67
bmc-galileo-9	39.947927	28.267702	11.680225	62358	5224	16810	63455	169	26315	41.00	43.61
bmc-ibm-13	4.121373	4.022388	0.098985	13070	19	114	13070	145	2690	4.67	5.19
bmc-ibm-2	0.054992	0.041994	0.012998	2723	55	144	2732	78	722	0.85	1.01
bmc-ibm-12	5.583151	4.846263	0.736888	39148	338	1037	39221	377	5539	6.23	7.03

Benchmark Information				B+E($\sum$, 10)												B+E($\sum$, 100)												B+E($\sum$, 1000)												B+E($\sum$, ∞)											
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
BMC	bmc-ibm-3	14930	72106	189182	0.189971	0.181972	0.007999	14864	12	42	14864	66	303	1.13	1.05	0.199970	0.192971	0.006999	14864	12	42	14864	66	303	1.01	0.59	0.192971	0.184972	0.007999	14864	12	42	14864	66	303	2.88	0.39	0.188971	0.180972	0.007999	14864	12	42	14864	66	303	2.68	0.36
BMC	bmc-ibm-4	28161	139716	366895	1.673746	1.389789	0.283957	27839	265	874	27879	282	4202	2.64	2.80	1.699742	1.408786	0.290956	27886	148	518	27887	274	4229	2.45	2.37	1.710740	1.418784	0.291956	27866	148	518	27887	274	4229	2.45	2.17	1.702741	1.415785	0.286956	27866	148	518	27887	274	4229	2.57	2.57
BMC	bmc-ibm-6	51639	368352	1007089	14.965725	13.361968	1.603757	50604	125	398	50617	1022	12443	16.00	16.09	15.511641	13.867891	1.643750	50605	121	386	50618	1021	12444	16.27	16.64	14.761756	13.232989	1.528767	50605	121	386	50618	1021	12444	15.50	15.99	15.038714	13.429959	1.608755	50605	121	386	50618	1021	12444	15.91	16.55
BMC	bmc-ibm-5	9396	41207	105281	1.398787	1.222814	0.175973	8539	1411	4597	8792	604	2608	2.69	2.04	1.425784	1.238812	0.186972	8569	1290	4368	8808	588	2638	2.21	1.96	1.457779	1.278806	0.178973	8546	1368	4578	8810	586	2615	2.70	1.86	1.427783	1.245811	0.181972	8547	1405	4681	8810	586	2616	2.39	1.91
BMC	cnt07-shuffled	1786	5856	16016	0.047993	0.046993	0.001000	1785	0	0	1785	1	0	1.00	0.13	0.048993	0.047993	0.001000	1785	0	0	1785	1	0	0.73	1.22	0.048993	0.048993	0	1785	0	0	1785	1	0	0.88	0.18	0.046993	0.046993	0	1785	0	0	1785	1	0	0.55	0.19
BMC	bmc-galileo-8	58074	294821	767187	?	?	?	?	?	?	?	?	?	3700	3700	34.117814	24.640254	9.477560	56476	7117	22656	57916	158	24437	35.576	101.91	35.904542	25.814076	10.090466	56392	7597	24158	57917	157	24353	37.39	36.25	34.482757	24.745238	9.737519	56474	7122	22527	57917	157	24435	35.89	37.70
BMC	cnt10-shuffled	20470	68561	187229	15.314672	15.301674	0.012998	20470	0	0	20470	0	0	20470	0	15.900583	15.885585	0.014998	20470	0	0	20470	0	0	16.77	47.45	15.657620	15.643622	0.013998	20470	0	0	20470	0	0	16.38	15.91	16.009566	15.994569	0.014997	20470	0	0	20470	0	0	16.76	17.15
BMC	cnt08-shuffled	4089	13531	36991	0.315952	0.313952	0.002000	4088	0	0	4088	1	0	1.24	0.71	0.315952	0.313952	0.002000	4088	0	0	4088	1	0	1.10	0.41	0.315952	0.313953	0.001999	4088	0	0	4088	1	0	1.18	0.52	0.316952	0.314952	0.002000	4088	0	0	4088	1	0	0.83	0.48
BN	blockmap_10_02.net	12562	26022	53076	1.450779	0.621906	0.828873	12463	165	427	12482	80	9935	2.37	4.63	1.426783	0.610907	0.815876	12470	122	278	12484	78	9942	2.19	1.63	1.418784	0.612907	0.805877	12470	122	278	12484	78	9942	2.09	2.19	1.423784	0.612907	0.810877	12470	122	278	12484	78	9942	1.91	2.48
BN	blockmap_05_03.net	2055	4143	8421	0.088987	0.048993	0.039994	1989	78	177	1995	60	1581	1.01	0.34	0.259961	0.141979	0.117982	1989	78	177	1995	60	1581	0.46	0.24	0.089986	0.049992	0.039994	1989	78	177	1995	60	1581	1.10	0.84	0.088987	0.049993	0.038994	1989	78	177	1995	60	1581	0.60	1.04
BN	blockmap_15_03.net	37709	78239	159611	13.536942	4.898255	8.638687	37492	305	719	37528	181	29820	14.64	15.25	14.275830	5.091226	9.184604	37493	288	657	37529	180	29821	14.58	14.92	13.883889	5.063230	8.820659	37493	288	657	37529	180	29821	14.19	14.99	14.202841	5.064230	9.138611	37493	288	657	37529	180	29821	14.86	14.80
BN	fs-13.net	21788	37154	84578	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	blockmap_22_01.net	108698	224008	454771	164.159044	39.330021	124.829023	108530	370	948	108610	88	83726	165.14	415.59	161.149501	39.294026	121.855475	108578	208	484	108621	77	83774	162.30	165.10	151.803922	39.262031	112.541891	108578	208	484	108621	77	83774	153.01	164.92	142.776294	35.957533	106.818761	108578	208	484	108621	77	83774	143.76	147.32
BN	blockmap_22_03.net	119003	247486	504902	115.773399	36.954382	78.819017	118521	1115	2927	118661	342	93009	117.48	311.37	107.332684	35.768563	71.564121	118694	411	936	118742	261	93182	108.70	112.91	112.436907	37.695269	74.741638	118694	411	936	118742	261	93182	113.76	115.32	120.777639	39.680968	81.096671	118694	411	936	118742	261	93182	122.17	117.76
BN	mastermind_06_08_03.net	3979	8833	19324	0.781881	0.666899	0.114982	3239	1862	5884	3470	509	3015	2.60	5.44	0.754885	0.677897	0.076988	3412	702	1566	3493	486	3188	1.51	1.25	0.772883	0.694895	0.077988	3412	702	1566	3493	486	3188	1.39	0.92	0.747887	0.670898	0.076989	3412	702	1566	3493	486	3188	1.25	1.54
BN	fs-07.net	3710	6104	13706	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	mastermind_04_08_04.net	5484	12596	27360	0.949856	0.763884	0.185972	4794	2205	7382	5095	389	4314	5.18	4.00	1.003848	0.816876	0.186972	4817	2138	7312	5112	372	4337	4.83	9.28	1.062839	0.944857	0.117982	5088	432	936	5124	360	4608	1.67	1.22	0.997848	0.880866	0.116982	5088	432	936	5124	360	4608	1.51	1.95
BN	blockmap_15_02.net	35386	72866	148028	11.111311	3.606452	7.504859	35241	208	496	35267	119	27631	12.01	12.74	11.340276	3.581456	7.758820	35242	192	436	35268	118	27632	12.34	12.00	11.651229	3.695438	7.955791	35242	192	436	35268	118	27632	12.54	11.36	11.359273	3.584455	7.774818	35242	192	436	35268	118	27632	12.10	33.90
BN	mastermind_05_08_03.net	3502	7816	17038	0.546917	0.458930	0.087987	2909	1546	4861	3105	397	2685	1.86	1.08	0.529920	0.470929	0.058991	3070	513	1134	3124	378	2846	1.34	0.82	0.524921	0.468929	0.055992	3070	513	1134	3124	378	2846	1.12	0.65	0.528920	0.472928	0.055992	3070	513	1134	3124	378	2846	1.09	0.63
BN	blockmap_20_03.net	86889	178682	362676	60.619784	21.384749	39.235035	86536	709	1829	86622	267	66792	61.92	68.21	63.499347	21.966661	41.532686	86610	369	840	86652	237	66866	64.53	66.49	63.633326	21.962661	41.670665	86610	369	840	86652	237	66866	64.50	67.42	58.226148	21.352754	36.873394	86610	369	840	86652	237	66866	58.99	64.59
BN	fs-29.net	229100	399794	918082	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	blockmap_05_02.net	1738	3452	6942	0.175974	0.091986	0.083988	1690	66	150	1699	39	1304	1.09	0.31	0.061990	0.031995	0.029995	1690	66	150	1699	39	1304	0.76	0.55	0.059991	0.030996	0.028995	1690	66	150	1699	39	1304	0.63	0.20	0.060990	0.031995	0.028995	1690	66	150	1699	39	1304	0.96	1.03
BN	blockmap_10_03.net	13786	28826	59113	5.284197	2.460626	2.823571	13634	252	625	13664	122	11060	6.30	2.15	1.873715	0.867868	1.005847	13645	183	417	13666	120	11071	2.79	2.23	1.857717	0.880866	0.976851	13645	183	417	13666	120	11071	2.65	2.08	1.846719	0.867868	0.978851	13645	183	417	13666	120	11071	2.39	2.89
BN	blockmap_10_01.net	11328	23175	46933	4.915253	1.623753	3.291500	11276	79	181	11293	35	8788	5.94	1.97	1.686744	0.560915	1.125829	11276	79	181	11293	35	8788	2.41	2.10	1.685744	0.550916	1.134828	11276	79	181	11293	35	8788	2.37	1.90	1.740735	0.575912	1.164823	11276	79	181	11293	35	8788	2.28	2.60
BN	mastermind_03_08_04.net	4720	10920	23608	1.659748	1.291804	0.367944	4270	1619	5526	4475	245	3790	3.86	1.50	0.608908	0.477928	0.130980	4304	1533	5425	4494	226	3824	1.73	1.55	0.670898	0.583912	0.086986	4504	180	396	4504	216	4024	1.46	0.73	0.631904	0.547917	0.083987	4504	180	396	4504	216	4024	1.10	1.57
BN	blockmap_20_01.net	78650	160055	322994	196.525124	48.848574	147.676550	78532	350	734	78574	76	59396	198.24	81.44	69.784391	18.656165	51.134226	78544	175	406	78580	70	59828	75.05	79.19	74.184723	20.686867	53.575856	78544	175	406	78580	70	59828	75.05	79.19	76.281403	20.611866	55.669537	78544	175	406	78580	70	59828	77.10	80.82
BN	fs-10.net	10220	17210	38990	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	fs-22.net	101420	175934	403106	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	blockmap_15_01.net	33035	67424	136296	12.261136	3.067534	9.193602	32956	132	323	32983	52	25408	13.25	13.04	11.957182	3.061535	8.895647	32956	132	323	32983	52	25408	12.75	35.25	12.328126	3.092530	9.235596	32956	132	323	32983	52	25408	13.05	12.92	12.742063	3.216511	9.525552	32956	132	323	32983	52	25408	13.29	13.56
BN	blockmap_05_01.net	1411	2737	5913	0.046993	0.018997	0.023996	1391	28	63	1397	14	1027	0.95	0.27	0.043993	0.018997	0.024996	1391	28	63	1397	14	1027	0.88	0.27	0.044993	0.018997	0.025996	1391	28	63	1397	14	1027	0.74	0.12	0.044993	0.017997	0.024996	1391	28	63	1397	14	1027	0.58	0.98
BN	blockmap_20_02.net	82786	169415	342931	55.166613	17.004414	38.162199	82528	557	1448	82608	178	63096	56.39	58.57	50.084386	16.680464	33.403922	82593	316	768	82635	151	63161	51.12	53.80	51.782128	16.914429	34.867699	82593	316	768	82635	151	63161	52.93	52.38	53.593853	16.885433	36.708420	82593	316	768	82635	151	63161	54.56	56.63
BN	fs-01.net	32	38	74	0	0	0	19	12	28	19	13	9	0.87	0.25	0	0	0	19	12	28	19	13	9	0.87	0.21	0	0	0	19	12	28	19	13	9	0.60	0.13	0	0	0	19	12	28	19	13	9	0.53	0.93
BN	fs-16.net	39872	68528	156464	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	blockmap_22_02.net	113870	235801	479949	97.924113	27.939759	70.022354	113509	919	2455	113640	230	88349	99.25	110.78	101.225561	30.407377	70.818234	113653	350	828	113703	167	88493	102.40	99.54	104.864059	31.226253	73.637806	113653	350	828	113703	167	88493	106.21	99.45	97.920117	31.236245	66.623872	113653	350	828	113703	167	88493	98.79	99.28
BN	fs-19.net	65930	113924	260642	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	mastermind_10_08_03.net	5887	12901	28468	6.210056	5.379182	0.830874	4532	3178	9859	4943	944	4308	34.34	35.27	2.060687	1.866716	0.193971	4780	1458	3294	4969	918	4556	2.78	2.38	2.051688	1.865717	0.185971	4780	1458	3294	4969	918	4556	2.29	2.19	2.062687	1.866716	0.195971	4780	1458	3294	4969	918	4556	2.76	3.08
BN	mastermind_03_08_05.net	7564	17690	38302	1.184820	0.910862	0.273958	6902	2612	8928	7258	306	6070	7.29	3.89	1.255809	0.980851	0.274958	6917	2555	8822	7276	288	6085	7.07	4.49	1.759733	1.480775	0.278958	6951	2472	8691	7286	278	6119	7.03	4.17	1.564762	1.369792	0.194970	7294	225	486	7294	270	6462	2.47	2.58
BN	fs-25.net	147800	257150	589850	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	fs-28.net	206528	360164	826868	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	sat-grid-pbl-0010	110	191	738	0.002999	0.002999	0	8	157	587	8	102	0	0.11	0.43	0.003999	0.003999	0	8	157	587	8	102	0	0.83	0.32	0.003999	0.003999	0	8	157	587	8	102	0	0.64	0.14	0.003999	0.003999	0	8	157	587	8	102	0	0.63	0.99
BN	sat-grid-pbl-0025	650	1226	4848	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	sat-grid-pbl-0015	240	436	1708	?	?	?	?	?	?	?	?	?	3700	42.23	?	?	?	?	?	?	?	?	?	3700	1277.11	?	?	?	?	?	?	?	?	?	3700	456.24	?	?	?	?	?	?	?	?	?	?	3700	447.06
BN	sat-grid-pbl-0020	420	781	3078	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	sat-grid-pbl-0030	930	1771	7018	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-22-9-q	2332	3696	7745	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	377.66	?	?	?	?	?	?	?	?	?	?	3700	452.32
BN	75-14-9-q	924	1456	3349	0.437934	0.417937	0.019997	87	538	1813	174	750	76	2487.71	52.84	0.155976	0.147977	0.007999	90	526	1773	192	732	79	957.57	210.53	0.155976	0.147977	0.007999	90	526	1773	195	729	79	837.35	209.78	0.159975	0.151976	0.007999	90	526	1773	195	729	79	965.27	211.41
BN	75-17-9-q	1377	2176	4565	0.311952	0.302953	0.008999	187	508	1729	270	1107	153	1288.58	56.26	0.920860	0.891865	0.028995	198	446	1512	284	1093	164	96.50	6.21	0.314952	0.305954	0.008998	216	364	1270	288	1089	182	3.83	2.38	0.316951	0.306953	0.009998	218	361	1262	288	1089	184	5.46	2.74
BN	75-24-9-q	2784	4416	9149	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-19-9-q	1729	2736	5685	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	143.84	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-15-9-q	1065	1680	3413	0.180972	0.171973	0.008999	136	412	1385	209	856	105	11.43	2.43	0.182972	0.173973	0.008999	146	373	1259	221	844	115	4.14	13.26	0.181973	0.173974	0.007999	146	374	1263	224	841	115	6.88	7.11	0.184971	0.176973	0.007998	147	372	1259	224	841	116	6.79	26.32
BN	75-23-9-q	2553	4048	8349	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-18-9-q	1548	2448	4985	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-26-9-q	3276	5200	11205	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-20-9-q	1920	3040	6349	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-25-9-q	3025	4800	9945	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-12-9-q	672	1056	2173	0.069989	0.065989	0.004000	101	218	753	139	533	81	1.12	0.60	0.069989	0.065989	0.004000	103	204	710	143	529	83	0.95	0.97	0.072988	0.068989	0.003999	103	204	710	143	529	83	0.77	0.33	0.073988	0.069989	0.003999	103	204	710	143	529	83	0.71	1.21
BN	75-16-9-q	1216	1920	4321	?	?	?	?	?	?	?	?	?	3700	426.52	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	?	3700	3700
BN	75-10-9-q	460	720	1533	0.033994	0.030995	0.002999	51	250	847	93	367	46	1.05	0.78	0.034994	0.030995	0.003999	53	243	827	98	362	48	0.89	0.43	0.036994	0.033994	0.003000	53	243	827	99	361	48	0.73	0.79	0.036994	0.031995	0.004999	53	243	827	99	361	48	0.60	1.05
BN	90-10-9-q	460	720	1261	0.026995	0.025996	0.000999	91	51	180	98	362	69	0.88	0.35	0.027995	0.026995	0.001000	98	15	88	99	361	76	0.81	0.17	0.028995	0.027995	0.001000	98	15	88	99	361	76	0.88	0.14	0.027995	0.026995	0.001000	98	15	88	99	361	76	0.76	0.15
BN	90-30-9-q	4380	6960	12089	2.881562	2.863565	0.017997	767	568	1786	873	3507	496	46.16	11.86	2.896560	2.879563	0.016997	822	348	1134	897	3483	551	3.91	3.31	2.939553	2.923555	0.015998	835	284	904	899	3481	564	3.62	3.08	2.873563	2.857566	0.015997	835	284	905	899	3481	564	3.38	3.85
BN	90-22-9-q	2332	3696	6421	0.755885	0.749886	0.005999	462	123	423	481	1851	260	1.58	2.47	0.771882	0.766883	0.004999	464	112	386	483	1849	262	1.50	1.12	0.744886	0.741887	0.002999	482	21	74	484	1848	280	1.49	0.90	0.743887	0.739888	0.003999	482	21	74	484	1848	280	1.25	1.69
BN	90-16-9-q	1216	1920	3485	0.214967	0.210967	0.004000	225	147	499	252	964	165	0.28	1.17	0.219966	0.215967	0.003999	226	146	502	255	961	166	0.99	0.42	0.217966	0.213967	0.003999	226	146	502	255	961	166	0.85	0.28	0.216967	0.212967	0.004000	226	146	502	255	961	166	0.67	1.15
BN	90-17-9-q	1377	2176	3881	0.280957	0.274958	0.005999	251	167	532	284	1093	194	0.39	1.13	0.283956	0.277957	0.005999	251	166	524	288	1089	194	0.99	1.12	0.282956	0.276957	0.005999	251	166	524	288	1089	194	0.91	0.41	0.283956	0.277957	0.005999	251	166	524	288	1089	194	1.09	0.32
BN	90-14-9-q	924	1456	2585	0.109983	0.108983	0.001000	181	68	214	194	730	99	0.53	0.78	0.109983	0.108983	0.001000	196	10	36	196	728	114	0.85	1.00	0.109983	0.108983	0.001000	196	10	36	196	728	114	0.72	0.72	0.110983	0.109983	0.001000	196	10	36	196	728	114	0.62	1.04
BN	90-38-9-q	7068	11248	18893	7.304890	7.280893	0.023997	1341	456	1427	1417	5651	793	10.18	22.77	7.294891	7.275894	0.018997	1404	179	575	1442	5626	856	8.09	8.01	7.318888	7.301890	0.016998	1443	0	0	1443	5625	895	8.17	8.03	7.587848	7.572850	0.014998	1443	0	0	1443	5625	895	8.36	8.34
BN	90-46-9-q	10396	16560	28417	?	?	?	?	?	?	?	?	?	3700	3700	?	?	?	?	?	?	?	?	?	3700	3700	16.388509	16.339516	0.048993	1976	702	2383

Benchmark Information				B+E($\sum$, 10)											B+E($\sum$, 100)											B+E($\sum$, 1000)											B+E($\sum$, ∞)										
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
BN	or-50-5-1-UC-10	100	250	653	0.000999	0.000999	0	58	1	4	58	42	47	0.86	0.21	0.000999	0.000999	0	58	1	4	58	42	47	0.16	0.24	0.000999	0.000999	0	58	1	4	58	42	47	0.74	0.12	0.000999	0.000999	0	58	1	4	58	42	47	0.51	0.02
BN	or-50-5-3-UC-10	100	250	659	0	0	0	71	2	6	71	29	39	0.83	0.17	0.000999	0	0.000999	71	2	6	71	29	39	0.25	0.24	0.000999	0.000999	0	71	2	6	71	29	39	0.86	0.11	0.000999	0.000999	0	71	2	6	71	29	39	0.63	0.90
BN	or-50-10-4-UC-10	100	250	655	0.000999	0	0.000999	61	2	7	61	39	45	0.92	0.38	0.000999	0.000999	0	61	2	7	61	39	45	0.48	0.24	0.000999	0	0.000999	61	2	7	61	39	45	0.63	0.11	0.000999	0.000999	0	61	2	7	61	39	45	0.76	0.92
BN	or-50-20-10-UC-10	100	250	658	0	0	0	61	5	16	61	39	42	0.88	0.27	0	0	0	61	5	16	61	39	42	0.54	0.23	0.000999	0.000999	0	61	5	16	61	39	42	0.75	0.11	0.000999	0.000999	0	61	5	16	61	39	42	0.89	0.85
BN	or-50-20-8-UC-10	100	250	656	0	0	0	66	1	3	66	34	41	0.82	0.39	0.000999	0.000999	0	66	1	3	66	34	41	0.70	0.23	0.000999	0.000999	0	66	1	3	66	34	41	0.88	0.11	0	0	0	66	1	3	66	34	41	0.51	0.92
BN	or-50-5-8-UC-10	100	250	654	0	0	0	62	1	4	62	38	46	0.45	0.31	0	0	0	62	1	4	62	38	46	0.77	0.24	0.000999	0.000999	0	62	1	4	62	38	46	0.64	0.08	0.000999	0.000999	0	62	1	4	62	38	46	0.64	0.90
BN	or-50-20-9-UC-10	100	250	656	0.000999	0.000999	0	57	3	8	57	43	44	0.53	0.38	0.000999	0	0.000999	57	3	8	57	43	44	0.84	0.23	0.000999	0.000999	0	57	3	8	57	43	44	0.77	0.46	0.000999	0.000999	0	57	3	8	57	43	44	0.77	0.97
BN	or-50-5-6-UC-10	100	250	656	0	0	0	71	0	0	71	29	43	0.86	0.23	0	0	0	71	0	0	71	29	43	0.75	0.31	0.000999	0	0.000999	71	0	0	71	29	43	0.89	0.09	0.000999	0.000999	0	71	0	0	71	29	43	0.90	0.01
BN	or-50-10-10-UC-10	100	250	655	0.000999	0.000999	0	68	0	0	68	32	45	0.93	0.24	0	0	0	68	0	0	68	32	45	0.81	0.25	0.000999	0.000999	0	68	0	0	68	32	45	0.67	0.08	0.000999	0.000999	0	68	0	0	68	32	45	0.50	0.17
BN	or-50-10-2-UC-10	100	250	657	0	0	0	67	2	7	67	33	43	0.82	0.19	0.000999	0.000999	0	67	2	7	67	33	43	0.92	0.23	0	0	0	67	2	7	67	33	43	0.80	0.13	0.000999	0.000999	0	67	2	7	67	33	43	0.63	0.91
BN	or-50-10-5-UC-10	100	250	656	0.000999	0.000999	0	60	2	7	60	40	43	0.88	0.20	0.000999	0.000999	0	60	2	7	60	40	43	0.99	0.29	0.000999	0.000999	0	60	2	7	60	40	43	0.56	0.15	0.000999	0.000999	0	60	2	7	60	40	43	0.77	0.96
BN	or-50-10-1-UC-10	100	250	655	0.000999	0.000999	0	60	2	6	60	40	45	0.85	0.21	0.000999	0.000999	0	60	2	6	60	40	45	0.05	0.30	0.000999	0.000999	0	60	2	6	60	40	45	0.69	0.06	0.000999	0.000999	0	60	2	6	60	40	45	0.91	0.92
BN	or-50-10-3-UC-10	100	250	657	0.000999	0.000999	0	62	4	12	62	38	43	0.92	0.22	0.000999	0.000999	0	62	4	12	62	38	43	0.20	0.31	0.000999	0.000999	0	62	4	12	62	38	43	0.81	0.10	0.000999	0.000999	0	62	4	12	62	38	43	0.51	0.97
BN	or-50-20-4-UC-10	100	250	655	0.000999	0.000999	0	60	2	8	60	40	45	0.80	0.26	0.000999	0.000999	0	60	2	8	60	40	45	0.80	0.32	0.000999	0.000999	0	60	2	8	60	40	45	0.59	0.11	0.000999	0.000999	0	60	2	8	60	40	45	0.64	0.92
BN	or-50-5-5-UC-10	100	250	653	0.000999	0.000999	0	54	2	8	54	46	47	0.87	0.22	0.000999	0	0.000999	54	2	8	54	46	47	0.86	0.31	0	0	0	54	2	8	54	46	47	0.73	0.11	0.000999	0.000999	0	54	2	8	54	46	47	0.77	0.98
BN	or-50-10-6-UC-10	100	250	655	0.000999	0.000999	0	65	1	4	65	35	45	0.87	0.21	0.000999	0.000999	0	65	1	4	65	35	45	0.97	0.37	0.000999	0.000999	0	65	1	4	65	35	45	0.85	0.11	0.000999	0.000999	0	65	1	4	65	35	45	0.90	0.90
BN	or-50-20-1-UC-10	100	250	654	0.000999	0.000999	0	54	3	11	54	46	46	0.94	0.40	0.000999	0.000999	0	54	3	11	54	46	46	0.04	0.28	0.000999	0.000999	0	54	3	11	54	46	46	0.62	0.08	0.000999	0.000999	0	54	3	11	54	46	46	0.52	0.94
BN	or-50-20-7-UC-10	100	250	655	0	0	0	61	2	7	61	39	45	0.84	0.30	0.000999	0.000999	0	61	2	7	61	39	45	0.05	0.31	0.000999	0.000999	0	61	2	7	61	39	45	0.74	0.11	0.000999	0.000999	0	61	2	7	61	39	45	0.65	0.92
BN	or-50-20-5-UC-10	100	250	654	0	0	0	58	2	8	58	42	46	0.90	0.20	0	0	0	58	2	8	58	42	46	0.12	0.29	0.000999	0.000999	0	58	2	8	58	42	46	0.87	0.11	0.000999	0.000999	0	58	2	8	58	42	46	0.79	0.96
BN	or-50-5-7-UC-10	100	250	653	0.000999	0	0.000999	58	1	4	58	42	47	0.91	0.33	0.000999	0.000999	0	58	1	4	58	42	47	0.23	0.31	0.000999	0.000999	0	58	1	4	58	42	47	0.63	0.11	0.000999	0.000999	0	58	1	4	58	42	47	0.48	0.93
BN	or-50-20-6-UC-10	100	250	655	0.000999	0.000999	0	58	3	10	58	42	45	0.97	0.21	0.000999	0.000999	0	58	3	10	58	42	45	0.29	0.30	0.000999	0.000999	0	58	3	10	58	42	45	0.76	0.17	0.000999	0.000999	0	58	3	10	58	42	45	0.61	0.98
BN	or-50-10-8-UC-10	100	250	655	0	0	0	70	0	0	70	30	45	0.84	0.31	0	0	0	70	0	0	70	30	45	0.69	0.32	0	0	0	70	0	0	70	30	45	0.89	0.36	0.000999	0.000999	0	70	0	0	70	30	45	0.74	0.97
BN	or-50-10-9-UC-10	100	250	653	0.000999	0.000999	0	58	1	4	58	42	47	0.90	0.22	0	0	0	58	1	4	58	42	47	0.43	0.29	0.000999	0.000999	0	58	1	4	58	42	47	0.65	0.58	0.000999	0.000999	0	58	1	4	58	42	47	0.87	0.98
BN	or-50-5-9-UC-10	100	250	655	0.000999	0.000999	0	62	1	3	62	38	45	0.88	0.17	0.000999	0.000999	0	62	1	3	62	38	45	0.49	0.31	0	0	0	62	1	3	62	38	45	0.77	0.65	0.000999	0.000999	0	62	1	3	62	38	45	0.47	0.80
BN	or-50-10-7-UC-10	100	250	654	0.000999	0	0.000999	54	3	12	54	46	46	0.95	0.20	0.000999	0.000999	0	54	3	12	54	46	46	0.58	0.29	0.000999	0.000999	0	54	3	12	54	46	46	0.90	0.74	0.000999	0.000999	0	54	3	12	54	46	46	0.60	0.87
BN	or-50-20-3-UC-10	100	250	657	0.000999	0	0.000999	54	6	23	54	46	43	0.90	0.21	0.000999	0	0.000999	54	6	23	54	46	43	0.73	0.31	0.000999	0.000999	0	54	6	23	54	46	43	0.66	0.08	0.000999	0.000999	0	54	6	23	54	46	43	0.73	0.97
BN	or-60-5-10-UC-10	120	300	789	0.000999	0.000999	0	80	3	10	80	40	51	0.96	0.23	0.000999	0.000999	0	80	3	10	80	40	51	0.80	0.29	0.000999	0.000999	0	80	3	10	80	40	51	0.78	0.05	0.000999	0.000999	0	80	3	10	80	40	51	0.86	1.00
BN	or-60-20-3-UC-10	120	300	790	0.000999	0.000999	0	77	5	16	77	43	49	0.83	0.17	0.000999	0.000999	0	77	5	16	77	43	49	0.90	0.12	0.000999	0.000999	0	77	5	16	77	43	49	0.90	0.12	0.000999	0.000999	0	77	5	16	77	43	49	0.46	0.06
BN	or-60-20-8-UC-10	120	300	787	0.000999	0.000999	0	68	5	17	68	52	53	0.89	0.20	0.001999	0.001999	0	68	5	17	68	52	53	0.97	0.26	0.001999	0.000999	0.001000	68	5	17	68	52	53	0.57	0.12	0.000999	0.000999	0	68	5	17	68	52	53	0.59	0.13
BN	or-60-5-5-UC-10	120	300	785	0.000999	0	0.000999	76	1	4	76	44	55	0.90	0.38	0.000999	0.000999	0	76	1	4	76	44	55	0.04	0.28	0.000999	0.000999	0	76	1	4	76	44	55	0.70	0.18	0.000999	0.000999	0	76	1	4	76	44	55	0.72	0.90
BN	or-60-20-2-UC-10	120	300	785	0.001999	0.001999	0	67	3	11	67	53	55	0.96	0.18	0.000999	0.000999	0	67	3	11	67	53	55	0.78	0.27	0.000999	0.000999	0	67	3	11	67	53	55	0.82	0.28	0.001999	0.001999	0	67	3	11	67	53	55	0.85	0.95
BN	or-60-10-10-UC-10	120	300	784	0.000999	0.000999	0	68	2	8	68	52	56	0.84	0.20	0.001999	0.001999	0	68	2	8	68	52	56	0.08	0.29	0.001999	0.000999	0.001000	68	2	8	68	52	56	0.59	0.11	0.001999	0.001999	0	68	2	8	68	52	56	0.46	0.02
BN	or-60-10-9-UC-10	120	300	786	0.000999	0.000999	0	81	0	0	81	39	54	0.90	0.43	0	0	0	81	0	0	81	39	54	0.15	0.32	0.000999	0.000999	0	81	0	0	81	39	54	0.71	0.24	0.000999	0.000999	0	81	0	0	81	39	54	0.59	0.07
BN	or-60-10-2-UC-10	120	300	785	0.000999	0.000999	0	72	2	7	72	48	54	0.89	0.21	0.000999	0.000999	0	72	2	7	72	48	54	0.24	0.28	0.000999	0.000999	0	72	2	7	72	48	54	0.83	0.24	0.000999	0.000999	0	72	2	7	72	48	54	0.71	0.07
BN	or-60-5-3-UC-10	120	300	783	0.000999	0.000999	0	68	1	4	68	52	57	0.95	0.39	0.000999	0.000999	0	68	1	4	68	52	57	0.31	0.22	0.000999	0.000999	0	68	1	4	68	52	57	0.60	0.64	0.001999	0.001999	0	68	1	4	68	52	57	0.84	0.14
BN	or-60-10-1-UC-10	120	300	785	0.000999	0.000999	0	71	2	8	71	49	55	0.04	0.31	0.000999	0.000999	0	71	2	8	71	49	55	0.70	0.23	0.000999	0.000999	0	71	2	8	71	49	55	0.72	0.11	0.001999	0.000999	0.001000	71	2	8	71	49	55	0.43	0.92
BN	or-60-5-6-UC-10	120	300	786	0.000999	0	0.000999	78	0	0	78	42	54	0.87	0.19	0.000999	0.000999	0	78	0	0	78	42	54	0.44	0.28	0.000999	0.000999	0	78	0	0	78	42	54	0.85	0.16	0.000999	0.000999	0	78	0	0	78	42	54	0.56	1.06
BN	or-60-5-8-UC-10	120	300	784	0.000999	0.000999	0	71	1	3	71	49	56	0.93	0.20	0.001999	0.000999	0.001000	71	1	3	71	49	56	0.50	0.30	0.000999	0.000999	0	71	1	3	71	49	56	0.61	0.21	0.001999	0.000999	0.001000	71	1	3	71	49	56	0.69	0.03
BN	or-60-10-7-UC-10	120	300	786	0.000999	0.000999	0	76	1	3	76	44	54	1.00	0.24	0.000999	0.000999	0	76	1	3	76	44	54	0.60	0.29	0.000999	0.000999	0	76	1	3	76	44	54	0.73	0.28	0.000999	0.000999	0	76	1	3	76	44	54	0.82	0.92
BN	or-60-20-5-UC-10	120	300	785	0.000999	0.000999	0	64	4	16	64	56	55	0.85	0.19	0.000999	0.000999	0	64	4	16	64	56	55	0.78	0.31	0.000999	0.000999	0	64	4	16	64	56	55	0.86	0.35	0.001999	0.000999	0.001000	64	4	16	64	56	55	0.52	0.96
BN	or-60-20-9-UC-10	120	300	786	0.001999	0.000999	0.001000	75	2	5	75	45	54	0.92	0.22	0.000999	0.000999	0	75	2	5	75	45	54	0.85	0.28	0.000999	0.000999	0	75	2	5	75	45	54	0.62	0.16	0.000999	0.000999	0	75	2	5	75	45	54	0.65	0.03
BN	or-60-20-7-UC-10	120	300	785	0.000999	0.000999	0	68	3	12	68	52	55	1.01	0.21	0.000999	0.000999	0	68	3	12	68	52	55	0.95	0.30	0.001999	0.000999	0	68	3	12	68	52	55	0.75	0.24	0.000999	0.000999	0	68	3	12	68	52	55	0.48	0.92
BN	or-60-10-6-UC-10	120	300	785	0.000999	0.000999	0	68	3	12	68	52	55	0.89	0.23	0.000999	0.000999	0	68	3	12	68	52	55	0.03	0.29	0.001999	0.000999	0.001000	68	3	12	68	52	55	0.87	0.30	0.001999	0.000999	0.001000	68	3	12	68	52	55	0.78	0.98
BN	or-60-5-1-UC-10	120	300	788	0.000999	0.000999	0	81	2	5	81	39	49	0.16	0.38	0.000999	0.000999	0	81	2	5	81	39	49	0.10	0.30	0.000999	0.000999	0	81	2	5	81	39	49	0.64	0.70	0.000999	0	0.000999	81	2	5	81	39	49	0.62	0.05
BN	or-60-10-4-UC-10	120	300	785	0.000999	0	0.000999	78	0	0	78	42	55	0.23	0.33	0.000999	0	0.000999	78	0	0	78	42	55	0.73	0.23	0.000999	0.000999	0	78	0	0	78	42	55	0.77	0.80	0.000999	0.000999	0	78	0	0	78	42	55	0.91	0.30
BN	or-60-5-7-UC-10	120	300	788	0.000999	0.000999	0	81	1	3	81	39	51	0.30	0.21	0.000999	0	0.000999	81	1	3	81	39	51	0.14	0.24	0.000999	0.000999	0	81	1	3	81	39	51	0.65	0.79	0.000999	0.000999	0	81	1	3	81	39	51	0.50	0.37
BN	or-60-20-10-UC-10	120	300	785	0.001999	0.000999	0.001000	67	3	11	67	53	55	0.83	0.22	0.000999	0.000999	0	67	3	11	67	53	55	0.21	0.32	0.001999	0.000999	0.001000	67	3	11	67	53	55	0.90	0.86	0.000999	0.000999	0	67	3	11	67	53	55	0.56	0.44
BN	or-60-5-4-UC-10	120	300	787	0.000999	0.000999	0	81	1	2	81	39	52	0.51	0.25	0.000999	0.000999	0	81	1	2	81	39	52	0.30	0.34	0.001999	0.000999	0.001000	81	1	2	81	39	52	0.65	0.95	0	0	0	81	1	2	81	39	52	0.46	0.98
BN	or-60-10-8-UC-10	120	300	788	0.000999	0.000999	0	82	2	6	82	38	49	0.58	0.20	0.000999	0.000999	0	82	2	6	82	38	49	0.73	0.27	0.000999	0.000999	0	82	2	6	82	38	49	0.72	0.01	0.000999	0.000999	0	82	2	6	82	38	49	0.53	0.04
BN	or-60-10-3-UC-10	120	300	783	0.000999	0.000999	0	67	1	4	67	53	57	0.86	0.38	0.001999	0.001999	0	67	1	4	67	53	57	0.79	0.29	0.000999	0.000999	0	67	1	4	67	53	57	0.80	0.08	0.000999	0.000999	0	67	1	4	67	53	57	0.60	0.10
BN	or-60-10-5-UC-10	120	300	788	0.000999	0.000999	0	76	3	8	76	44	52	0.93	0.28	0.000999	0.000999	0	76	3	8	76	44	52	0.89	0.24	0.000999	0.000999	0	76	3	8	76	44	52	0.87	0.15	0.000999	0.000999	0	76	3	8	76	44	52	0.67	0.91
BN	or-60-20-1-UC-10	120	300	784	0.001999	0.001999	0	64	3	9	64	56	56	0.02	0.21	0.000999	0.000999	0	64	3	9	64	56	56	0.96	0.26	0.000999	0.000999	0	64	3	9	64	56	56	0.63	0.24	0.001999	0.001999	0	64	3	9	64	56	56	0.75	0.96
BN	or-60-5-2-UC-10	120	300	785	0.000999	0.000999	0	75	1	4	75	45	55	0.09	0.40	0.001999	0.000999	0.001000	75	1	4	75	45	55	0.03	0.24	0.000999	0.000999	0	75	1	4	75	45	55	0.70	0.26	0.000999	0.000999	0	75	1	4	75	45	55	0.82	1.01
BN	or-60-20-4-UC-10	120	300	786	0.000999	0.000999	0	64	5	20	64	56	54	0.83	0.18	0.001999	0.001999	0	64	5	20	64	56	54	0.75	0.26	0.001999	0.001999	0	64	5	20	64	56	54	0.78	0.33	0.001999	0.001999	0	64	5	20	64	56	54	0.45	0.56
BN	or-60-5-9-UC-10	120	300	785	0.000999	0.000999	0	79	0	0	79	41	54	0.50	0.28	0.000999	0.000999	0	79	0	0	79	41	54	0.08	0.27	0.000999	0.000999	0	79	0	0	79	41	54	0.84	0.43	0.000999	0	0.000999	79	0	0	79	41	54	0.51	0.62
BN	or-60-20-6-UC-10	120	300	788	0.001999	0.001999	0	64	7	27	64	56	52	0.57	0.23	0.001999	0.001999	0	64	7	27	64	56	52	0.14	0.23	0.000999	0.000999	0	64	7	27	64	56	52	0.60	0.56	0.000999	0.000999	0	64	7	27	64	56	52	0.59	0.72
BN	or-100-20-8-UC-10	200	500	1310	0.003999	0.003999	0	115	6	19	115	85	90	0.90	0.21	0.003999	0.003999	0	115	6	19	115	85	90	0.22	0.30	0.003999	0.003999	0	115	6	19	115	85	90	0.66	0.71	0.003999	0.003999	0	115	6	19	115	85	90	0.65	0.91
BN	or-100-10-6-UC-10	200	500	1305	0.003999	0.003999	0	118	0	0	118	82	95	0.96	0.21	0.003999	0.002999	0.001000	118	0	0	118	82	95	0.29	0.24	0.003999	0.003999	0	118	0	0	118	82	95	0.74	0.87	0.003999	0.002999	0.001000	118	0	0	118	82	95	0.73	0.97
BN	or-100-10-1-UC-10	200	500	1310	0.002999	0.002999	0	123	3	11	123	77	89	0.03	0.24	0.003999	0.003999	0	123	3	11	123	77	89	0.68	0.26	0.003999	0.002999	0.001000	123	3	11	123	77	89	0.81	0.83	0.003999	0.002999	0.001000	123	3	11	123	77	89	0.80	0.07
BN	or-100-20-3-UC-10	200	500	1304	0.004999	0.003999	0.001000	108	2	8	108	92	96	0.10	0.19	0.003999	0.003999	0	108	2	8	108	92	96	0.75	0.36	0.003999	0.003999	0	108	2	8	108	92	96	0.56	0.85	0.004999	0.003999	0.001000	108	2	8	108	92	96	0.52	0.96
BN	or-100-5-4-UC-10	200	500	1310	0.003999	0.002999	0.001000	122	3	9	122	78	90	0.86	0.36	0.003999	0.002999	0.001000	122	3	9	122	78	90	0.84	0.22	0.002999	0.002999	0	122	3	9	122	78	90	0.63	0.96	0.002999	0.002999	0	122	3	9	122	78	90	0.59	0.02
BN	or-100-20-6-UC-10	200	500	1308	0.003999	0.002999	0.001000	114	4	14	114	86	92	0.49	0.26	0.002999	0.002999	0	114	4	14	114	86	92	0.93	0.24	0.003999	0.003999	0	114	4	14	114	86	92	0.70	0.05	0.003999	0.003999	0	114	4	14	114	86	92	0.67	0.09
BN	or-100-20-2-UC-10	200	500	1312	0.002999	0.002999	0	123	4	14	123	77	86	0.55	0.21	0.002999	0.002999	0	123	4	14	123	77	86	0.99	0.31	0.003999	0.002999	0.001000	123	4	14	123	77	86	0.77	0.14	0.002999	0.001999	0.001000	123	4	14	123	77	86	0.74	0.98
BN	or-100-10-10-UC-10	200	500	1310	0.002999	0.002999	0	116	6	22	116	84	90	0.87

Benchmark Information					B+E(Σ, 10)															B+E(Σ, 100)															B+E(Σ, 1000)															B+E(Σ, ∞)											
Family	Name	#var	#cl	#lit	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT	time B + E	time B	time E	#elim	#cl	#lit	#input	#output	#forget	Cachet	SharpSAT
BN	or-100-5-8-UC-10	200	500	1306	0.002999	0.002999	0	118	1	2	118	82	94	0.87	0.25	0.002999	0.001999	0.001000	118	1	2	118	82	94	0.52	0.28	0.003999	0.002999	0.001000	118	1	2	118	82	94	0.72	0.74	0.009999	0.008999	0.001000	118	1	2	118	82	94	0.22	0.95
BN	or-100-20-1-UC-10	200	500	1311	0.003999	0.002999	0.001000	112	8	31	112	88	89	0.94	0.38	0.002999	0.002999	0	112	8	31	112	88	89	0.61	0.29	0.003999	0.003999	0	112	8	31	112	88	89	0.80	1.00	0.003999	0.002999	0.001000	112	8	31	112	88	89	0.22	1.01
BN	or-70-20-2-UC-10	140	350	918	0.001999	0.001999	0	85	4	15	85	55	62	1.00	0.39	0.000999	0.000999	0	85	4	15	85	55	62	0.78	0.35	0.001999	0.001999	0	85	4	15	85	55	62	0.85	0.01	0.001999	0.000999	0.001000	85	4	15	85	55	62	0.28	0.06
BN	or-70-20-1-UC-10	140	350	922	0.000999	0.000999	0	89	7	23	89	51	57	0.10	0.23	0.001999	0.001999	0	89	7	23	89	51	57	0.85	0.17	0.000999	0.000999	0	89	7	23	89	51	57	0.64	0.08	0.004000	0.003000	0.001000	89	7	23	89	51	57	0.51	0.93
BN	or-70-10-4-UC-10	140	350	916	0.001999	0.001999	0	77	4	12	77	63	64	0.87	0.23	0.001999	0.001999	0	77	4	12	77	63	64	0.95	0.18	0.000999	0.000999	0	77	4	12	77	63	64	0.70	0.18	0.001999	0.000999	0.001000	77	4	12	77	63	64	0.52	0.53
BN	or-70-20-7-UC-10	140	350	916	0.001999	0.000999	0.001000	82	3	8	82	58	63	0.52	0.33	0.001999	0.000999	0.001000	82	3	8	82	58	63	0.02	0.24	0.001999	0.001999	0	82	3	8	82	58	63	0.78	0.28	0.000999	0.000999	0	82	3	8	82	58	63	0.58	0.59
BN	or-70-10-3-UC-10	140	350	921	0.000999	0.000999	0	90	5	16	90	50	57	0.58	0.34	0.001999	0.001999	0	90	5	16	90	50	57	0.08	0.32	0.000999	0.000999	0	90	5	16	90	50	57	0.84	0.35	0.004000	0.004000	0	90	5	16	90	50	57	0.82	0.91
BN	or-70-5-8-UC-10	140	350	919	0.001999	0.000999	0.001000	92	2	7	92	48	61	0.80	0.42	0.001999	0.001999	0	92	2	7	92	48	61	0.72	0.34	0.001999	0.000999	0.001000	92	2	7	92	48	61	0.60	0.45	0.000999	0.000999	0	92	2	7	92	48	61	0.82	0.98
BN	or-70-5-6-UC-10	140	350	914	0.000999	0.000999	0	82	1	4	82	58	66	0.87	0.44	0.001999	0.001999	0	82	1	4	82	58	66	0.13	0.44	0.001999	0.000999	0.001000	82	1	4	82	58	66	0.67	0.58	0.001999	0.001999	0	82	1	4	82	58	66	0.89	0.08
BN	or-70-5-10-UC-10	140	350	919	0.001999	0.001999	0	90	3	11	90	50	61	0.97	0.27	0.000999	0.000999	0	90	3	11	90	50	61	0.19	0.25	0.000999	0.000999	0	90	3	11	90	50	61	0.74	0.67	0.005000	0.004000	0.001000	90	3	11	90	50	61	0.12	0.17
BN	or-70-10-5-UC-10	140	350	914	0.001999	0.000999	0.001000	82	1	4	82	58	65	0.05	0.26	0.001999	0.000999	0.001000	82	1	4	82	58	65	0.29	0.27	0.001999	0.000999	0.001000	82	1	4	82	58	65	0.81	0.68	0.001999	0.000999	0.001000	82	1	4	82	58	65	0.13	0.91
BN	or-70-20-4-UC-10	140	350	916	0.001999	0.000999	0.001000	78	4	15	78	62	64	0.88	0.38	0.001999	0.001999	0	78	4	15	78	62	64	0.70	0.37	0.001999	0.001999	0	78	4	15	78	62	64	0.59	0.69	0.001999	0.001999	0	78	4	15	78	62	64	0.19	0.60
BN	or-70-10-9-UC-10	140	350	919	0.000999	0.000999	0	94	2	6	94	46	61	0.16	0.40	0.000999	0.000999	0	94	2	6	94	46	61	0.76	0.20	0.000999	0.000999	0	94	2	6	94	46	61	0.65	0.76	0.004000	0.003000	0.001000	94	2	6	94	46	61	0.40	0.66
BN	or-70-20-6-UC-10	140	350	917	0.001999	0.000999	0.001000	81	4	15	81	59	63	0.23	0.37	0.001999	0.000999	0.001000	81	4	15	81	59	63	0.87	0.21	0.000999	0.000999	0	81	4	15	81	59	63	0.73	0.86	0.001999	0.001999	0	81	4	15	81	59	63	0.40	0.89
BN	or-70-20-8-UC-10	140	350	915	0.001999	0.000999	0.001000	77	3	10	77	63	65	0.32	0.38	0.000999	0.000999	0	77	3	10	77	63	65	0.94	0.31	0.000999	0.000999	0	77	3	10	77	63	65	0.80	0.95	0.001999	0.001999	0	77	3	10	77	63	65	0.47	0.94
BN	or-70-5-1-UC-10	140	350	916	0.001999	0.001999	0	88	1	3	88	52	64	0.84	0.30	0.001999	0.001999	0	88	1	3	88	52	64	1.01	0.26	0.001999	0.000999	0.001000	88	1	3	88	52	64	0.55	0.19	0.005000	0.004000	0.001000	88	1	3	88	52	64	0.70	0.01
BN	or-70-10-10-UC-10	140	350	915	0.001999	0.000999	0.001000	85	1	3	85	55	65	0.52	0.31	0.000999	0.000999	0	85	1	3	85	55	65	0.73	0.27	0.000999	0.000999	0	85	1	3	85	55	65	0.61	0.26	0.001999	0.001999	0	85	1	3	85	55	65	0.70	0.08
BN	or-70-10-6-UC-10	140	350	915	0.001999	0.001999	0	84	1	3	84	56	65	0.58	0.35	0.001999	0.001999	0	84	1	3	84	56	65	0.05	0.37	0.001999	0.001999	0	84	1	3	84	56	65	0.70	0.22	0.001999	0.001999	0	84	1	3	84	56	65	0.77	0.92
BN	or-70-5-7-UC-10	140	350	916	0.001999	0.000999	0.001000	85	2	7	85	55	64	0.78	0.36	0.001999	0.000999	0.001000	85	2	7	85	55	64	0.12	0.23	0.001999	0.000999	0.001000	85	2	7	85	55	64	0.76	0.24	0.005000	0.005000	0	85	2	7	85	55	64	1.00	0.16
BN	or-70-5-2-UC-10	140	350	916	0.000999	0.000999	0	87	1	3	87	53	63	0.85	0.22	0.000999	0.000999	0	87	1	3	87	53	63	0.23	0.25	0.000999	0.000999	0	87	1	3	87	53	63	0.85	0.34	0.001999	0.001999	0	87	1	3	87	53	63	1.01	0.20
BN	or-70-20-10-UC-10	140	350	917	0.000999	0.000999	0	83	3	10	83	57	63	0.91	0.22	0.001999	0.001999	0	83	3	10	83	57	63	0.30	0.35	0.001999	0.001999	0	83	3	10	83	57	63	0.91	0.44	0.000999	0.000999	0	83	3	10	83	57	63	0.07	0.92
BN	or-70-5-3-UC-10	140	350	924	0.000999	0.000999	0	110	0	0	110	30	54	1.01	0.37	0.000999	0	0.000999	110	0	0	110	30	54	0.69	0.39	0	0	0	110	0	0	110	30	54	0.61	0.53	0.002999	0.001999	0.001000	110	0	0	110	30	54	0.49	1.02
BN	or-70-10-1-UC-10	140	350	918	0.001999	0.001999	0	88	2	7	88	52	59	0.86	0.33	0.001999	0.001999	0	88	2	7	88	52	59	0.43	0.32	0.001999	0.001999	0	88	2	7	88	52	59	0.67	0.63	0.000999	0.000999	0	88	2	7	88	52	59	0.50	1.01
BN	or-70-5-9-UC-10	140	350	920	0.000999	0.000999	0	98	2	5	98	42	60	0.12	0.41	0.000999	0.000999	0	98	2	5	98	42	60	0.49	0.39	0.000999	0	0.000999	98	2	5	98	42	60	0.75	0.74	0.000999	0.000999	0	98	2	5	98	42	60	0.56	0.05
BN	or-70-5-5-UC-10	140	350	917	0.001999	0.001999	0	92	0	0	92	48	61	0.19	0.53	0.000999	0.000999	0	92	0	0	92	48	61	0.58	0.26	0.000999	0.000999	0	92	0	0	92	48	61	0.83	0.84	0.005000	0.004000	0.001000	92	0	0	92	48	61	0.57	1.05
BN	or-70-10-7-UC-10	140	350	915	0.001999	0.001999	0	85	1	3	85	55	65	0.26	0.28	0.000999	0.000999	0	85	1	3	85	55	65	0.73	0.28	0.000999	0.000999	0	85	1	3	85	55	65	0.58	0.94	0.005999	0.005000	0.000999	85	1	3	85	55	65	0.64	0.05
BN	or-70-10-8-UC-10	140	350	917	0.000999	0.000999	0	92	0	0	92	48	63	0.37	0.29	0.001999	0.000999	0.001000	92	0	0	92	48	63	0.80	0.43	0.001999	0.000999	0.001000	92	0	0	92	48	63	0.64	0.23	0.000999	0.000999	0	92	0	0	92	48	63	0.64	0.11
BN	or-70-5-4-UC-10	140	350	916	0.001999	0.001999	0	83	2	6	83	57	64	0.80	0.25	0.001000	0.001000	0	83	2	6	83	57	64	0.90	0.47	0.001999	0.000999	0.001000	83	2	6	83	57	64	0.72	0.16	0.001999	0.000999	0.001000	83	2	6	83	57	64	0.74	0.23
BN	or-70-20-3-UC-10	140	350	916	0.001999	0.000999	0.001000	74	5	17	74	66	64	0.87	0.24	0.001999	0.000999	0.001000	74	5	17	74	66	64	1.01	0.22	0.000999	0.000999	0	74	5	17	74	66	64	0.78	0.21	0.006999	0.005999	0.001000	74	5	17	74	66	64	0.80	0.03
BN	or-70-20-5-UC-10	140	350	917	0.001999	0.001999	0	78	4	13	78	62	63	0.93	0.36	0.001999	0.001999	0	78	4	13	78	62	63	0.08	0.23	0.001999	0.001999	0	78	4	13	78	62	63	0.65	0.29	0.005999	0.004999	0.001000	78	4	13	78	62	63	0.97	0.62
BN	or-70-10-2-UC-10	140	350	915	0.001999	0.000999	0.001000	78	3	10	78	62	65	0.03	0.37	0.001999	0.000999	0.001000	78	3	10	78	62	65	0.70	0.30	0.001999	0.001999	0	78	3	10	78	62	65	0.71	0.37	0.001999	0.001999	0	78	3	10	78	62	65	0.97	0.68
BN	or-70-20-9-UC-10	140	350	921	0.001999	0.001999	0	94	2	5	94	46	58	0.12	0.36	0.000999	0.000999	0	94	2	5	94	46	58	0.09	0.39	0.000999	0.000999	0	94	2	5	94	46	58	0.80	0.42	0.000999	0.000999	0	94	2	5	94	46	58	0.03	0.99

Benchmark Information					$\sum$		pmc ($\sum$)						B+E($\sum$, ∞)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
Qif	binsearch.16.pp	251	1925	7321	1.02	17.75	0.09	186	566	1519	0.47	0.35	0.013997	219	0	0	0.87	0.50
Qif	binsearch.16	2003	5637	13861	TO	740.96	0.43	1675	779	2018	1.16	0.78	0.261961	1725	16	96	0.88	0.80
Qif	mixdup	309	452	1092	0.59	0.53	0.00	0	0	0	0.57	0.59	0.008998	148	0	0	0.69	0.59
Qif	binsearch.32	4473	14011	35245	TO	TO	1.64	4005	1022	2710	2.14	1.17	1.000848	4082	32	224	2.01	3.11
Qif	binsearch.32.pp	251	1917	7304	0.82	6.07	0.03	186	595	1606	0.49	0.60	0.014997	219	0	0	0.08	0.21
Qif	10random	587	1685	4157	0.60	0.61	0.03	448	301	883	0.61	0.35	0.028995	458	0	0	0.17	0.81
Qif	sum.32	639	1708	4356	3.92	TO	?	?	?	?	TO	TO	0.036994	510	0	0	0.24	0.83
Handmade	5_140_sd_schur	700	51600	151910	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	5_100_sd_schur	500	26860	78510	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	qg2-08	512	148957	584637	44.30	12.15	0.60	0	0	0	2.29	5.03	1.746735	511	0	0	2.40	5.22
Handmade	qg5-11	1331	64054	174879	1.18	0.76	0.59	1327	6	12	1.29	2.40	0.466929	972	1277	3272	1.05	1.55
Handmade	qg3-08	512	10469	25869	0.94	0.43	0.03	306	1509	3622	0.33	0.73	0.066990	267	1400	3395	0.81	0.49
Handmade	ls15-normalized	2562	31136	64442	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	ls9-normalized	456	2864	6056	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	qg7-09	729	22060	58744	0.66	0.42	0.09	724	11	26	0.83	0.72	0.080988	586	382	990	0.77	0.14
Handmade	ls16-normalized	3165	41595	85905	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	ls10-normalized	657	4761	10017	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	ls12-normalized	1221	11231	23441	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	qg6-09	729	21844	58024	0.88	0.42	0.11	725	7	16	0.77	0.72	0.100985	726	3	6	0.74	0.31
Handmade	ls13-normalized	1596	16248	33804	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	ls11-normalized	910	7480	15670	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	ls8-normalized	301	1603	3409	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	qg4-09	729	15580	39304	18.38	20.20	0.43	350	4201	9951	14.30	4.80	98.958956	315	4037	9630	111.87	112.95
Handmade	qg1-08	512	148957	580829	102.83	64.61	1.80	302	3272	10178	3.47	3.03	5.378183	302	3876	13093	5.85	5.72
Handmade	qg1-07	343	68083	263593	0.85	0.76	0.12	192	745	1727	0.92	0.74	0.063991	189	1093	2798	0.66	0.17
Handmade	qg2-07	343	68083	265777	0.88	0.74	0.12	176	1347	3193	0.57	0.72	0.100985	169	2384	7240	0.95	0.23
Handmade	qg7-13	2197	97072	256426	93.62	54.97	11.99	1353	15135	37184	33.58	20.81	21.455738	1141	15964	38720	33.58	25.56
Handmade	ls14-normalized	2041	22789	47281	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	23_rd_r45	253	42504	389620	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	20_rd_r45	190	20349	184110	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	par8-3	350	1171	3115	0.58	0.38	0.00	0	0	0	0.62	0.61	0	350	0	0	0.53	0.17
Handmade	par16-2-c	349	1392	4054	1.78	0.69	0.15	0	0	0	0.78	1.45	0.157975	349	0	0	0.82	0.30
Handmade	par8-1-c	64	254	732	0.58	0.40	0.00	0	0	0	0.33	0.34	0	64	0	0	0.62	0.08
Handmade	par16-4-c	324	1292	3754	1.11	0.50	0.14	0	0	0	0.39	1.11	0.047992	324	0	0	0.79	0.32
Handmade	par16-2	1015	3374	9044	2.85	1.66	0.16	0	0	0	0.23	1.16	0.146978	1015	0	0	0.73	0.36
Handmade	par16-3-c	334	1332	3874	1.36	0.59	0.11	0	0	0	1.01	1.08	0.100984	334	0	0	0.96	0.16
Handmade	par8-2	350	1157	3059	0.57	0.57	0.00	0	0	0	0.67	0.58	0	350	0	0	0.61	0.12
Handmade	par8-4-c	67	266	768	0.57	0.38	0.00	0	0	0	0.25	0.58	0	67	0	0	0.73	0.18
Handmade	par8-2-c	68	270	780	0.16	0.36	0.00	0	0	0	0.99	0.34	0	68	0	0	0.80	0.32
Handmade	par16-1-c	317	1264	3670	1.34	0.80	0.14	0	0	0	0.91	0.79	0.109983	317	0	0	0.68	0.50
Handmade	par8-4	350	1155	3051	0.58	0.38	0.00	0	0	0	0.49	0.64	0	350	0	0	0.63	0.63
Handmade	par16-4	1015	3324	8844	1.12	0.87	0.01	0	0	0	0.43	0.78	0.133980	1015	0	0	0.86	0.15
Handmade	par8-5	350	1171	3115	0.58	0.61	0.00	0	0	0	0.24	0.62	0	350	0	0	0.68	0.14
Handmade	par8-5-c	75	298	864	0.56	0.64	0.00	0	0	0	0.19	0.64	0	75	0	0	0.74	0.19
Handmade	par16-1	1015	3310	8788	1.49	0.74	0.13	0	0	0	0.32	1.16	0.393940	1015	0	0	0.47	0.42
Handmade	par16-3	1015	3344	8924	2.65	0.69	0.12	0	0	0	0.18	1.06	0.138979	1015	0	0	0.23	0.46
Handmade	par8-3-c	75	298	864	0.61	0.58	0.00	0	0	0	0.95	0.58	0	75	0	0	0.15	0.38
Handmade	par16-5-c	341	1360	3958	1.35	0.59	0.04	0	0	0	0.97	0.81	0.084987	341	0	0	0.46	0.54
Handmade	par8-1	350	1149	3027	0.56	0.54	0.00	0	0	0	0.85	0.33	0	350	0	0	0.44	0.99
Handmade	par16-5	1015	3358	8980	3.10	0.78	0.16	0	0	0	0.99	1.33	0.353946	1015	0	0	0.71	0.18
Handmade	fphp-015-020	300	4965	10200	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	fphp-010-020	200	2810	5800	TO	105.92	?	?	?	?	TO	307.94	?	?	?	?	TO	139.67
Handmade	ais12	265	5666	13003	1081.49	TO	16.30	0	4269	10209	1129.10	TO	?	?	?	?	TO	TO
Handmade	ais10	181	3151	7255	17.88	5.87	0.49	0	2377	5707	18.62	7.23	51.970099	10	2188	6960	67.28	58.76
Handmade	ais6	61	581	1351	0.56	0.65	0.00	2	390	935	0.50	0.58	0.010998	8	343	1021	0.59	0.17
Handmade	ais8	113	1520	3515	0.88	0.41	0.04	3	1115	2663	0.96	0.68	0.373943	11	974	3030	1.30	0.62
Handmade	lang12	576	13584	28134	3300.24	3061.78	0.11	378	4724	9970	947.49	1272.12	43.822338	192	4790	11908	1999.86	TO
Handmade	lang28	3136	174160	353934	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang23	2116	96370	196489	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang20	1600	63280	129370	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang16	1024	32320	66408	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang15	1024	32320	66408	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang24	2304	109536	223164	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang27	2916	156114	317439	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Handmade	lang19	1444	54226	110979	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	bw_large.a	459	4675	10809	0.55	0.72	0.01	0	0	0	0.67	0.62	0	459	0	0	0.71	0.20
Planning	log-2	1337	24777	50017	2.25	0.80	0.47	699	4386	9008	1.44	2.20	0.520921	910	3096	7852	1.52	0.65
Planning	prob005.pddl	2701	29534	59897	74.40	73.09	1.31	1184	11551	23729	26.00	19.94	1.962702	1508	9501	21456	52.63	8.79
Planning	tire-1	352	1038	2133	0.83	0.41	0.00	274	137	312	0.68	0.66	0.007998	270	181	463	0.77	0.07
Planning	bw_large.c	3016	50457	114314	5.49	1.26	0.18	3013	1	2	0.33	1.24	0.045993	3013	1	2	0.96	0.12
Planning	huge	459	7054	15567	0.54	0.47	0.00	0	0	0	0.14	0.60	0.001000	459	0	0	0.64	0.05
Planning	logistics.b	843	7301	19024	7.62	2.81	0.05	508	1364	3632	1.28	1.80	0.089987	542	1275	3886	3.78	0.89
Planning	logistics.c	1141	10719	27978	395.70	36.79	0.08	664	2480	6637	397.83	33.97	0.198970	721	2347	7046	734.04	26.31
Planning	hanoi5	1931	14468	35856	TO	TO	0.51	0	0	0	1.63	3.39	1.256809	1931	0	0	1.90	0.58
Planning	anomaly	48	261	583	0.56	0.70	0.00	0	0	0	0.69	0.59	0	48	0	0	0.68	0.07
Planning	tire-3	577	2004	4118	0.60	0.53	0.02	427	317	684	0.85	0.95	0.043994	433	318	700	0.97	0.08
Planning	bomb_b10_t10_p_t20	18480	36820	98820	1.10	1.52	7.80	9540	9080	26160	8.63	24.36	79.802868	10020	0	0	80.56	29.68
Planning	emptyroom_d4_g2_p_t6	224	698	1832	0.58	0.56	0.01	96	386	1064	0.92	0.61	0.009998	174	204	737	0.85	0.06
Planning	emptyroom_d12_g6_p_t8	952	3350	8832	11.38	0.76	0.15	385	1909	5248	22.48	4.25	0.114983	780	1166	3854	0.92	0.30
Planning	safe_safe_10_p_t5	166	356	870	0.56	0.56	0.00	50	256	670	0.80	0.63	0.006998	106	36	72	0.54	0.04
Planning	safe_safe_30_p_t8	759	1892	4532	0.58	0.36	0.06	240	1412	3572	0.75	0.82	0.119981	489	406	812	0.79	0.21
Planning	comm_p01_p_t8	1218	3657	9481	25.60	5.46	0.05	493	2464	6690	3.66	74.03	0.153977	921	480	960	1.07	1.16
Planning	coins_p04_p_t8	1376	3757	9429	TO	TO	?	?	?	?	TO	TO	0.214967	881	872	1910	0.74	0.30
Planning	coins_p02_p_t6	1040	2821	7077	TO	TO	?	?	?	?	TO	TO	0.123982	665	632	1374	0.99	0.19
Planning	bomb_b5_t5_p_t5	1340	2610	6860	0.86	0.62	0.14	670	740	1980	0.89	0.57	0.131979	760	0	0	0.71	0.29
Planning	uts_k2_p_t6	631	2275	6124	503.66	214.85	0.06	281	1234	3199	597.05	288.67	0.045993	470	575	1501	29.95	3.76
Planning	blocks_right_6_p_t5	2790	25961	71187	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	bomb_b10_t10_p_t6	5600	11060	29660	0.87	0.50	0.76	2820	2920	8240	1.44	1.36	2.490622	3020	0	0	3.03	2.45
Planning	ring_3_p_t8	392	1008	2500	0.99	0.83	0.01	222	462	1306	11.67	5.99	0.013997	328	113	379	0.57	0.06
Planning	flip_no_action_1_p_t8	57	152	400	0.55	0.33	0.00	40	14	40	0.67	0.50	0	40	15	44	0.70	0.06
Planning	ring2_r6_p_t5	308	957	2518	3.34	0.44	0.01	120	591	1636	16.25	1.97	0.012998	252	189	610	0.84	0.14
Planning	emptyroom_d8_g4_p_t8	624	2066	5488	7.10	4.58	0.02	257	1137	3184	5.17	2.44	0.042993	508	642	2267	0.72	0.25
Planning	coins_p04_p_t5	872	2353	5901	TO	TO	?	?	?	?	TO	TO	0.087986	557	512	1106	0.94	0.14
Planning	bomb_b10_t10_p_t16	14800	29460	79060	0.96	1.36	5.01	7613	7398	21260	5.70	5.78	16.735456	8020	0	0	17.35	18.14
Planning	emptyroom_d16_g8_p_t10	1592	5702	15032	228.03	2.40	0.12	640	3262	8952	143.73	13.35	0.338949	1300	2126	6995	5.32	2.37
Planning	uts_k1_p_t5	164	499	1356	0.55	0.36	0.00	91	178	491	0.67	0.50	0.003000	127	50	145	0.61	0.06
Planning	bomb_b10_t10_p_t13	12040	23940	64240	0.93	0.91	3.36	6180	6000	17200	4.07	4.12	11.176301	6520	0	0	11.95	11.32
Planning	coins_p10_p_t5	1988	4959	12319	TO	TO	?	?	?	?	TO	TO	0.480927	1191	1045	2171	1.08	0.55
Planning	coins_p05_p_t8	1376	3757	9429	TO	TO	?	?	?	?	TO	TO	0.216967	881	872	1910	0.75	0.28
Planning	safe_safe_2_p_t10	166	331	815	0.71	0.32	0.00	50	231	615	0.70	0.55	0.005999	111	6	12	0.88	0.03
Planning	bomb_b10_t10_p_t18	16640	33140	88940	0.70	1.48	6.37	8580	8200	23600	7.12	7.20	21.314760	9020	0	0	21.95	22.03
Planning	sort_num_s_3_p_t6	189	594	1584	0.46	0.34	0.00	108	312	942	0.66	0.59	0.006998	162	12	24	0.58	0.61
Planning	ring_3_p_t10	484	1256	3116	4.47	2.79	0.01	276	578	1634	180.94	55.70	0.019996	403	189	642	0.73	0.08
Planning	ring2_r8_p_t8	632	2029	5344	TO	13.63	?	?	?	?	TO	TO	0.048992	528	453	1504	1.07	0.19
Planning	bomb_b5_t5_p_t8	2120	4170	10970	0.84	0.58	0.11	1090	1100	3000	0.52	0.69	0.325951	1210	0	0	0.89	0.88
Planning	comm_p05_p_t6	4026	14709	38037	237.75	209.79	0.40	1425	11160	29239	88.88	TO	1.584759	3081	3240	6480	2.21	1.69
Planning	flip_1_p_t6	25	60	156	0.69	0.31	0.00	0	0	0	0.69	0.58	0	18	0	0	0.52	0.08
Planning	sort_num_s_4_p_t8	768	2884	7880	TO	154.77	?	?	?	?	TO	159.28	1.005847	633	934	3420	266.89	42.03
Planning	uts_k5_p_t10	5631	27806	71130	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	sort_num_s_7_p_t10	7049	30422	83944	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	ring_5_p_t8	632	1679	4166	5.10	0.91	0.02	370	769	2176	276.34	32.65	0.028995	535	279	931	0.63	0.10
Planning	sort_num_s_6_p_t5	2091	8715	24030	TO	TO	?	?	?	?	TO	TO	1.096833	1980	525	1050	1.86	1.16
Planning	bomb_b10_t10_p_t15	13880	27620	74120	0.66	1.00	4.38	7140	6880	19760	5.35	5.13	14.783752	7520	0	0	15.41	14.96
Planning	ring_4_p_t10	632	1673	4152	5.45	3.56	0.02	368	769	2176	659.09	284.81	0.027995	529	307	1046	0.90	0.12
Planning	sort_num_s_5_p_t10	2175	8770	24140	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	uts_k5_p_t6	3427	16738	42754	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p01_p_t10	1712	4693	11781	TO	TO	?	?	?	?	TO	TO	0.338949	1097	1112	2446	0.42	0.38
Planning	comm_p04_p_t8	4041	14370	37282	3294.42	TO	0.40	1434	10840	28605	154.58	TO	1.608755	3114	2880	5760	2.19	1.80
Planning	comm_p03_p_t6	2228	7503	19503	27.53	20.18	0.15	839	5416	14524	9.83	31.92	0.496925	1695	1344	2688	1.09	1.46
Planning	blocks_right_3_p_t10	1589	8628	23876	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	uts_k3_p_t6	1315	5332	14094	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p05_p_t10	1712	4693	11781	TO	TO	?	?	?	?	TO	TO	0.333950	1097	1112	2446	1.02	0.40
Planning	sort_num_s_3_p_t10	309	986	2632	1.10	0.40	0.01	180	520	1570	0.77	0.61	0.017997	270	20	40	0.62	0.04
Planning	safe_safe_2_p_t5	86	171	403	0.93	0.30	0.00	25	121	320	0.92	0.51	0.000999	56	6	12	0.76	0.03
Planning	bomb_b5_t1_p_t5	564	1086	2796	1.00	0.30	0.01	319	208	590	0.93	0.54	0.021996	336	0	0	0.91	0.11
Planning	safe_safe_2_p_t8	134	267	657	0.44	0.62	0.00	40	187	497	0.66	0.52	0.003999	89	6	12	0.62	0.11
Planning	emptyroom_d20_g10_corners_p_t8	1608	5524	14696	39.05	35.95	0.07	642	3056	8544	33.32	25.90	0.183972	1376	1588	5443	11.51	10.01
Planning	coins_p10_p_t8	3134	7911	19663	TO	TO	?	?	?	?	TO	TO	1.143826	1893	1716	3598	1.80	1.23
Planning	sort_num_s_7_p_t8	5649	24346	67172	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	ring2_r6_p_t6	366	1144	3012	38.18	0.44	0.01	144	706	1956	181.36	6.19	0.014997	300	238	780	0.62	0.05
Planning	coins_p01_p_t6	1040	2821	7077	TO	TO	?	?	?	?	TO	TO	0.123981	665	632	1374	0.88	0.16
Planning	sort_num_s_7_p_t6	4249	18270	50400	TO	TO	?	?	?	?	TO	TO	10.130460	4074	1260	2520	10.74	10.28
Planning	emptyroom_d16_g8_p_t6	968	3518	9224	5.13	0.97	0.06	384	2054	5576	1.85	2.26	0.095986	820	1142	3621	1.00	0.14
Planning	coins_p03_p_t8	1376	3757	9429	TO	TO	?	?	?	?	TO	TO	0.215968	881	872	1910	0.84	0.29

Benchmark Information					Σ		pmc(Σ)						B+E(Σ, ∞)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
Planning	ring_5-p.t6	300	760	1884	0.52	0.33	0.02	168	346	978	2.71	0.86	0.008998	247	85	282	0.61	0.04
Planning	flip_1-p.t10	41	100	260	0.73	0.32	0.00	0	0	0	0.71	0.54	0	30	0	0	0.74	0.09
Planning	comm_p10_p.t10	17539	75516	191696	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p02_p.t8	1376	3757	9429	TO	TO	?	?	?	?	TO	TO	0.221967	881	872	1910	0.84	0.29
Planning	safe_safe_30_p.t6	577	1528	3624	0.45	0.40	0.11	180	1168	2904	0.86	0.80	0.072988	367	406	812	0.61	0.57
Planning	blocks_right_3_p.t8	1275	6914	19128	3062.57	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	ring_4_p.t5	332	848	2102	0.47	0.38	0.02	188	384	1086	1.98	0.81	0.009998	269	142	476	0.54	0.03
Planning	bomb_b10_t5_p.t10	5460	10815	28815	0.53	0.47	2.14	2805	2760	7770	2.89	1.30	2.232661	3015	0	0	2.92	2.40
Planning	blocks_right_2_p.t8	643	3029	8623	3.91	3.74	0.09	304	1753	4873	11.82	2.68	0.151976	468	1192	3837	2.38	2.09
Planning	blocks_right_5_p.t5	1996	14681	38626	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	flip_no_action_1_p.t6	43	114	300	0.19	0.29	0.00	30	10	28	0.55	0.55	0	30	11	32	0.60	0.01
Planning	bomb_b10_t10_p.t11	10200	20260	54360	0.54	0.74	7.11	5220	5120	14640	7.89	3.26	8.044777	5520	0	0	8.80	8.20
Planning	uts_k4_p.t8	2969	13381	34776	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p02_p.t5	872	2353	5901	TO	TO	?	?	?	?	TO	TO	0.086987	557	512	1106	0.70	0.11
Planning	comm_p01_p.t10	1510	4569	11849	45.30	19.77	0.08	609	3100	8422	8.39	218.97	0.238964	1149	600	1200	1.07	0.29
Planning	emptyroom_d16_g8_p.t8	1280	4610	12128	19.43	12.80	0.09	512	2658	7264	13.40	4.07	0.175973	1060	1634	5308	0.86	0.39
Planning	emptyroom_d16_g8_p.t5	812	2972	7772	1.19	1.10	0.05	320	1752	4732	1.03	0.77	0.067989	700	896	2775	0.48	0.61
Planning	bomb_b20_t5_p.t6	8500	16825	45325	0.51	0.60	2.06	4275	4400	12550	2.72	2.71	5.654140	4525	0	0	6.01	6.29
Planning	emptyroom_d24_g12_p.t8	1936	7226	18912	40.00	29.16	0.21	768	4250	11488	28.64	11.43	0.370944	1620	2666	8415	2.22	0.88
Planning	blocks_right_4_p.t5	1334	8343	22385	2351.99	320.85	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p05_p.t5	3384	12261	31701	48.82	259.88	0.30	1209	9228	24150	38.23	140.72	1.126829	2571	2700	5400	1.73	1.19
Planning	blocks_right_4_p.t8	2117	13257	35573	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p02_p.t8	1995	6444	16764	54.61	44.57	0.13	768	4560	12315	15.88	146.43	0.414937	1524	1008	2016	0.98	0.45
Planning	blocks_right_3_p.t6	961	5200	14380	62.82	35.54	0.10	351	3750	10081	556.44	29.65	0.514922	610	2839	8635	79.01	13.57
Planning	flip_1-p.t5	21	50	130	0.43	0.29	0.00	0	0	0	0.62	0.50	0	15	0	0	0.57	0.06
Planning	blocks_right_6_p.t10	5525	48741	128747	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p05_p.t10	6594	24501	63381	TO	TO	0.99	2289	18888	49590	2721.20	TO	4.270351	5121	5400	10800	4.82	12.92
Planning	uts_k1_p.t8	257	796	2166	0.51	0.33	0.00	146	285	787	0.61	0.66	0.005999	193	87	230	0.28	0.08
Planning	uts_k1_p.t10	319	994	2706	0.61	0.45	0.00	180	361	997	0.69	0.95	0.008998	239	112	291	0.35	0.08
Planning	safe_safe_5_p.t8	134	267	657	0.71	0.69	0.00	40	187	497	0.44	0.68	0.003999	89	6	12	0.52	0.16
Planning	sort_num_s_3_p.t8	249	790	2108	0.88	0.36	0.01	144	416	1256	0.64	0.67	0.008998	216	16	32	0.59	0.07
Planning	bomb_b5_t1_p.t6	672	1702	3554	0.71	0.79	0.01	378	264	744	0.60	0.63	0.031995	402	0	0	0.69	0.31
Planning	emptyroom_d12_g6_p.t5	604	2144	5628	1.00	0.94	0.03	240	1244	3388	1.12	0.93	0.042993	516	620	1991	0.78	0.29
Planning	ring_5-p.t5	410	1061	2630	0.62	0.64	0.01	235	481	1360	1.90	2.25	0.010998	340	156	505	0.84	0.09
Planning	bomb_b10_t10_p.t17	15720	31300	84000	0.84	1.52	5.71	8100	7760	22320	6.36	17.93	19.475039	8520	0	0	20.45	56.67
Planning	coins_p05_p.t6	1040	2821	7077	TO	TO	?	?	?	?	TO	TO	0.122981	665	632	1374	0.64	0.74
Planning	blocks_right_6_p.t6	3337	30517	82699	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p01_p.t8	1376	3757	9429	TO	TO	?	?	?	?	TO	TO	0.213967	881	872	1910	0.80	0.74
Planning	flip_no_action_1_p.t10	71	190	500	0.43	0.30	0.00	50	18	52	0.86	0.08	0.000999	50	19	56	0.61	0.10
Planning	bomb_b20_t5_p.t10	14100	28025	75525	0.92	1.23	5.47	7175	7100	20450	6.10	5.85	16.007566	7525	0	0	16.79	46.36
Planning	comm_p10_p.t6	10691	45324	115032	TO	TO	?	?	?	?	TO	TO	11.078316	6719	21087	57468	1888.01	TO
Planning	uts_k2_p.t8	833	3027	8156	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	safe_safe_2_p.t6	102	203	499	0.48	0.54	0.00	30	143	379	0.63	0.51	0.001999	67	6	12	0.44	0.06
Planning	comm_p01_p.t6	926	2745	7113	4.78	1.50	0.03	377	1828	4958	1.35	4.34	0.089986	693	360	720	0.59	0.35
Planning	ring_5-p.t10	780	2091	5190	1639.32	5.00	?	?	?	?	TO	TO	0.045993	665	361	1215	1.46	0.31
Planning	sort_num_s_4_p.t10	956	3602	9844	TO	1290.97	?	?	?	?	TO	2270.44	5.204209	793	1106	4008	2558.88	394.87
Planning	bomb_b10_t10_p.t14	12960	25780	69180	0.82	0.92	3.87	6657	6473	18573	4.55	4.59	12.872043	7020	0	0	13.50	13.01
Planning	ring_4_p.t6	392	1013	2512	1.01	0.62	0.01	224	461	1304	2.84	1.48	0.013997	321	175	590	0.53	1.03
Planning	coins_p05_p.t5	872	2353	5901	TO	TO	?	?	?	?	TO	TO	0.088986	557	512	1106	0.75	0.19
Planning	sort_num_s_5_p.t5	1100	4395	12090	2291.48	TO	?	?	?	?	TO	TO	0.334949	957	868	3256	27.15	33.63
Planning	comm_p10_p.t8	14115	60420	153364	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	uts_k10_p.t10	21451	148891	358620	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	bomb_b10_t10_p.t19	17560	34980	93880	0.90	1.32	7.08	9060	8640	24880	7.78	7.91	24.696245	9520	0	0	25.28	26.91
Planning	emptyroom_d28_g14_corners_p.t5	1436	4894	13028	2.80	4.29	0.07	562	2710	7580	2.18	1.66	0.130980	1304	914	3070	1.01	0.44
Planning	safe_safe_30_p.t10	941	2256	5440	0.43	0.55	0.08	300	1656	4240	0.69	0.62	0.178972	611	406	812	0.70	0.20
Planning	bomb_b20_t5_p.t5	7100	14025	37775	0.45	0.52	1.17	3550	3725	10575	1.79	1.76	4.096378	3775	0	0	4.94	4.08
Planning	coins_p10_p.t6	2370	5943	14767	TO	TO	?	?	?	?	TO	TO	0.675898	1390	1435	3234	1.28	1.70
Planning	uts_k10_p.t6	13047	89563	215484	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	emptyroom_d28_g14_corners_p.t6	1712	5872	15632	8.62	5.29	0.09	674	3252	9096	7.10	4.37	0.186972	1520	1352	4585	2.75	1.31
Planning	coins_p03_p.t6	1040	2821	7077	TO	TO	?	?	?	?	TO	TO	0.123982	665	632	1374	1.00	0.15
Planning	uts_k3_p.t8	1737	7094	18770	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	safe_safe_10_p.t10	321	666	1640	0.75	0.30	0.01	100	466	1240	0.60	0.54	0.053991	211	36	72	0.63	0.15
Planning	blocks_right_2_p.t10	801	3781	10767	109.33	48.89	0.04	380	2184	6069	55.15	29.21	1.085835	579	1554	4995	45.27	56.94
Planning	emptyroom_d12_g6_p.t10	1184	4154	10968	140.20	1.47	0.07	480	2354	6488	82.64	5.06	0.203969	956	1530	5092	2.92	1.23
Planning	blocks_right_5_p.t8	3169	23162	60688	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	sort_num_s_3_p.t5	159	496	1322	0.82	0.57	0.00	90	260	785	0.91	0.49	0.013998	135	10	20	0.61	0.16
Planning	ring_4_p.t8	512	1343	3332	2.21	0.67	0.01	296	615	1740	37.65	15.92	0.056992	425	241	818	1.05	0.16
Planning	bomb_b5_t5_p.t6	1600	3130	8230	0.47	0.34	0.07	810	860	2320	0.96	0.61	0.545917	910	0	0	1.15	0.69
Planning	emptyroom_d24_g12_p.t6	1464	5558	14472	10.70	1.82	0.15	577	3325	8904	3.14	2.26	0.585911	1252	1918	5825	1.52	0.78
Planning	comm_p04_p.t5	2577	8988	23308	53.25	24.49	0.18	933	6655	17520	14.32	32.46	1.993697	1953	1800	3600	2.73	1.97
Planning	bomb_b5_t1_p.t10	1104	2166	5586	0.39	0.36	0.03	637	358	1016	0.65	0.69	0.239964	666	0	0	1.16	0.19
Planning	sort_num_s_5_p.t8	1745	7020	19320	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	ring2_r8_p.t10	784	2527	6660	TO	162.16	?	?	?	?	TO	TO	0.083987	656	583	1956	2.73	0.56
Planning	uts_k10_p.t8	17249	119227	287052	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	emptyroom_d24_g12_p.t10	2408	8894	23352	447.18	58.49	0.28	960	5174	14072	320.67	40.56	0.692895	1988	3414	10995	13.77	6.83
Planning	emptyroom_d28_g14_corners_p.t8	2264	7828	20840	89.38	63.73	0.38	898	4336	12128	227.83	48.05	0.335949	1952	2228	7618	26.05	19.81
Planning	uts_k1_p.t6	195	598	1626	0.38	0.31	0.00	112	197	544	0.65	0.51	0.003999	149	65	180	0.61	0.07
Planning	uts_k4_p.t6	2247	10057	26112	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p03_p.t5	872	2353	5901	TO	TO	?	?	?	?	TO	TO	0.087986	557	512	1106	0.85	0.11
Planning	emptyroom_d28_g14_corners_p.t10	2816	9784	26048	966.47	TO	0.52	1122	5420	15160	2616.27	TO	0.634904	2384	3104	10652	288.69	272.12
Planning	uts_k5_p.t8	4529	22272	56942	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	sort_num_s_7_p.t5	3549	15232	42014	TO	TO	?	?	?	?	TO	TO	3.077532	3395	1050	2100	3.60	4.25
Planning	comm_p02_p.t6	1515	4836	12576	7.37	4.61	0.08	588	3384	9129	4.01	8.54	0.235964	1146	756	1512	0.96	1.24
Planning	sort_num_s_5_p.t6	1315	5270	14500	TO	TO	?	?	?	?	TO	TO	1.136828	1144	1186	4493	378.52	353.59
Planning	comm_p10_p.t5	8979	37776	95866	3415.68	TO	?	?	?	?	TO	TO	8.056775	5739	17072	46022	283.25	172.56
Planning	sort_num_s_4_p.t6	580	2166	5916	280.82	39.20	0.04	198	1650	4830	887.36	46.51	0.135979	485	604	2222	6.63	5.84
Planning	bomb_b10_t10_p.t8	7440	14740	39540	0.75	0.55	1.54	3780	3800	10800	2.13	2.08	4.401331	4020	0	0	5.18	5.31
Planning	safe_safe_10_p.t8	259	542	1332	0.64	0.35	0.01	80	382	1012	0.86	0.52	0.012998	169	36	72	0.53	0.99
Planning	emptyroom_d8_g4_p.t6	472	1550	4120	1.26	0.70	0.01	192	854	2392	1.28	0.81	0.024996	396	406	1468	0.70	1.02
Planning	bomb_b10_t10_p.t12	9280	18420	49420	1.07	0.52	2.35	4740	4680	13360	2.92	2.98	6.867956	5020	0	0	7.71	6.75
Planning	comm_p02_p.t10	2475	8052	20952	363.90	112.73	0.18	948	5736	15501	55.11	TO	0.636904	1902	1260	2520	1.48	1.92
Planning	emptyroom_d8_g4_p.t5	396	1292	3436	0.79	0.47	0.01	160	712	1996	0.72	0.67	0.018997	340	288	1071	0.63	0.07
Planning	ring2_r6_p.t8	482	1518	4000	TO	0.90	?	?	?	?	TO	97.55	0.029995	396	336	1120	0.89	0.20
Planning	ring_3_p.t5	254	636	1576	0.36	0.31	0.00	141	288	814	0.68	0.56	0.006998	208	62	203	0.57	0.36
Planning	safe_safe_10_p.t6	197	418	1024	0.66	0.29	0.00	60	298	784	0.84	0.50	0.008998	127	36	72	0.70	0.43
Planning	safe_safe_5_p.t10	166	331	815	0.67	0.64	0.00	50	231	615	0.83	0.56	0.004999	111	6	12	0.84	0.15
Planning	emptyroom_d20_g10_corners_p.t5	1020	3454	9188	1.55	1.23	0.04	402	1910	5340	1.29	1.13	0.071989	920	658	2237	0.76	0.36
Planning	ring2_r8_p.t5	404	1282	3376	165.94	0.55	0.01	160	794	2194	105.11	56.20	0.018997	336	258	826	0.91	0.25
Planning	emptyroom_d4_g2_p.t8	296	926	2432	0.70	0.29	0.01	128	510	1408	0.58	0.51	0.015997	222	312	1081	0.60	0.15
Planning	uts_k2_p.t5	530	1899	5108	14.65	19.65	0.01	233	1033	2663	16.88	14.36	0.032994	397	461	1193	3.07	0.51
Planning	emptyroom_d20_g10_corners_p.t6	1216	4144	11024	3.98	3.03	0.05	482	2292	6408	3.15	2.64	0.105983	1072	968	3305	1.44	0.86
Planning	comm_p03_p.t8	2936	9999	25999	299.62	88.45	0.23	1095	7296	19588	56.15	TO	0.859870	2255	1792	3584	1.44	3.33
Planning	uts_k3_p.t10	2159	8856	23446	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	blocks_right_4_p.t10	2639	16533	44365	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p10_p.t10	3898	9879	24559	TO	TO	?	?	?	?	TO	TO	1.806726	2361	2166	4552	2.48	1.82
Planning	coins_p04_p.t10	1712	4693	11781	TO	TO	?	?	?	?	TO	TO	0.986850	1097	1112	2446	1.63	1.15
Planning	bomb_b10_t10_p.t12	11120	22100	59300	0.74	1.02	2.89	5700	5560	15920	3.70	3.57	9.409569	6020	0	0	10.07	9.55
Planning	safe_safe_5_p.t5	86	171	420	0.65	0.57	0.00	25	121	320	0.54	0.52	0.004999	56	6	12	0.82	0.04
Planning	coins_p02_p.t10	1712	4693	11781	TO	TO	?	?	?	?	TO	TO	0.986850	1097	1112	2446	1.62	1.06
Planning	emptyroom_d8_g4_p.t10	776	2582	6856	68.50	13.03	0.02	320	1422	3976	47.49	23.63	0.237963	620	878	3055	5.31	1.53
Planning	bomb_b10_t10_p.t5	4680	9220	24720	0.70	0.41	0.62	2340	2480	6960	1.14	1.16	4.984242	2520	0	0	5.51	5.27
Planning	uts_k3_p.t5	1104	4451	11756	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	bomb_b10_t5_p.t8	4380	8655	23055	0.71	0.43	0.52	2235	2250	6300	1.36	1.05	4.248354	2415	0	0	4.97	2.44
Planning	sort_num_s_6_p.t8	3324	13926	38412	TO	TO	?	?	?	?	TO	TO	780.529342	3168	840	1680	782.57	784.57
Planning	blocks_right_4_p.t6	1595	9981	26781	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	emptyroom_d4_g2_p.t10	368	1154	3032	0.70	0.30	0.01	160	634	1752	0.87	0.49	0.024996	270	420	1426	0.63	1.03
Planning	bomb_b20_t5_p.t8	11300	22425	60425	0.78	0.78	2.99	5725	5750	16500	3.54	3.72	10.049472	6025	0	0	10.84	11.17
Planning	flip_1-p.t8	33	80	208	0.64	0.28	0.00	0	0	0	0.24	0.49	0	24	0	0	0.58	1.05
Planning	blocks_right_2_p.t6	485	2277	6479	1.00	0.54	0.02	228	1304	3608	0.67	0.74	0.060990	355	851	2680	0.92	0.44
Planning	uts_k10_p.t5	10946	74731	179700	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	bomb_b10_t5_p.t5	2760	5415	14415	0.73	0.30	0.19	1380	1485	4095	1.05	0.72	0.579912	1515	0	0	0.75	0.70
Planning	bomb_b5_t5_p.t10	2640	5210	13710	0.61	0.32	0.19	1370	1340	3680	1.10	0.70	0.499924	1510	0	0	1.01	0.82
Planning	emptyroom_d4_g2_p.t5	188	584	1532	0.69	0.28	0.00	81	323	892	0.52	0.52	0.006998	152	110	369	0.52	0.04
Planning	uts_k2_p.t10	1035	3779	10188	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	ring_5-p.t6	484	1267	3142	1.63	0.77	0.01	280	577	1632	6.82	2.87	0.015997	405	197	647	0.84	1.03
Planning	coins_p04_p.t6	1040	2821	7077	TO	TO	?	?	?	?	TO	TO	0.122982	665	632	1374	0.62	0.25
Planning	safe_safe_5_p.t6	102	203	499	0.62	0.62	0.00	30	143	379	0.80	0.47	0.002999	67	6	12	0.74	0.28
Planning	blocks_right_3_p.t5	804	4343	12006	25.95	5.92	0.07	291	3130	8394	53.32	3.93	0.218967	518	2287	6871	8.38	2.37
Planning	blocks_right_6_p.t8	4431	39629	105723	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	emptyroom_d20_g10_corners_p.t10	2000	6904	18368	1275.19	429.12	0.10	802	3820	10680	376.08	301.39	0.355945	1680	2208	7579	122.48	136.83
Planning	comm_p04_p.t10	5017	17958	46598	TO	TO	0.60	1768	13630	35995	688.76	TO	2.475624	3888	3600	7200	3.00	3.52
Planning	sort_num_s_6_p.t6	2502	10452	28824	TO	TO	?	?	?	?	TO	TO	4.173366	2376	630	1260	4.83	5.05
Planning	coins_p01_p.t5	872	2353	5901	TO	TO	?	?	?	?	TO	TO	0.085987	557	512	1106	0.58	1.07
Planning	uts_k5_p.t5	2876	13971	35660	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO

Benchmark Information					Σ		pmc(Σ)						B+E(Σ, ∞)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
Planning	sort_num_s_4_p_t5	486	1807	4934	29.17	16.59	0.03	165	1375	4025	93.76	20.21	0.068989	413	422	1562	1.36	0.73
Planning	emptyroom_d24_g12_p_t5	1228	4724	12252	1.54	1.07	0.12	480	2864	7612	1.38	1.10	0.150977	1068	1544	4534	0.73	1.18
Planning	blocks_right_2_p_t5	406	1901	5407	0.71	0.37	0.02	190	1078	2966	0.58	0.59	0.039993	299	679	2122	0.65	1.08
Planning	flip_no_action_1_p_t5	36	95	250	0.64	0.30	0.00	25	8	22	0.57	0.47	0	25	9	26	0.62	0.99
Planning	comm_p03_p_t10	3644	12495	32495	2567.59	TO	0.35	1352	9174	24648	222.13	TO	1.307801	2815	2240	4480	2.01	2.33
Planning	bomb_b10_t5_p_t6	3300	6495	17295	0.72	0.51	0.27	1665	1740	4830	0.79	0.77	0.845871	1815	0	0	1.68	0.97
Planning	uts_k4_p_t10	3691	16705	43440	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	coins_p03_p_t10	1712	4693	11781	TO	TO	?	?	?	?	TO	TO	0.336949	1097	1112	2446	1.16	1.36
Planning	uts_k4_p_t5	1886	8395	21780	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p02_p_t5	1275	4032	10482	2.76	2.29	0.06	498	2796	7536	2.07	2.70	0.166974	957	630	1260	0.72	0.24
Planning	ring2_r8_p_t10	598	1892	4988	TO	14.94	?	?	?	?	TO	TO	0.054991	492	434	1460	2.02	1.17
Planning	comm_p04_p_t6	3065	10782	27966	239.73	55.61	0.25	1101	8047	21208	31.72	150.45	0.925860	2340	2160	4320	1.46	1.93
Planning	emptyroom_d12_g6_p_t6	720	2546	6696	1.49	1.25	0.03	289	1465	4008	1.20	0.69	0.059990	604	802	2609	0.67	1.06
Planning	comm_p03_p_t5	1874	6255	16255	7.75	18.68	0.11	713	4469	11974	4.22	8.63	0.352947	1415	1120	2240	1.16	0.43
Planning	blocks_right_5_p_t10	3951	28816	75396	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p05_p_t8	5310	19605	50709	TO	TO	0.66	1857	15024	39414	464.03	TO	2.793575	4101	4320	8640	3.40	3.79
Planning	safe_safe_30_p_t5	486	1346	3170	0.55	0.55	0.03	150	1046	2570	0.84	0.53	0.053991	306	406	812	0.61	1.04
Planning	ring2_r8_p_t6	480	1531	4028	2372.23	1.49	0.02	192	947	2620	1788.86	TO	0.025996	400	323	1052	0.78	1.03
Planning	bomb_b5_t1_p_t8	888	1734	4470	0.60	0.29	0.02	507	336	954	0.81	0.50	0.050992	534	0	0	0.60	1.12
Planning	blocks_right_5_p_t6	2387	17508	45980	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	sort_num_s_6_p_t10	4146	17400	48000	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	comm_p01_p_t5	780	2289	5929	1.13	1.06	0.08	319	1510	4092	1.68	1.41	0.188972	579	300	600	0.78	1.04
Planning	4blocksb	410	24758	69182	1.16	0.61	0.20	0	0	0	1.04	0.56	0.068990	408	0	0	0.67	1.07
Planning	logistics.a	828	6718	17915	2.64	0.41	0.13	545	1082	2805	1.08	0.61	0.196970	568	1047	2952	1.53	0.19
Planning	medium	116	953	2133	0.57	0.30	0.00	0	0	0	0.83	0.46	0.002000	115	0	0	0.72	0.40
Planning	prob012.pddl	2324	31857	64476	57.44	8.92	1.26	1277	5576	11494	155.10	5.33	1.869716	1481	4399	9874	75.49	10.20
Planning	prob004.pddl	2303	20963	42581	28.79	1.74	0.80	1384	2893	6069	28.14	1.71	0.468929	1682	2071	4890	10.86	2.87
Planning	4blocks	758	47820	133940	149.32	23.68	1.36	339	6210	16206	4.93	2.94	3.189515	345	3638	10862	5.60	4.93
Planning	4step	165	418	831	0.66	0.89	0.00	135	37	86	0.81	0.46	0.000999	131	42	97	0.73	0.46
Planning	tire-2	550	2001	4115	0.69	0.27	0.00	450	159	361	0.83	0.47	0.010998	449	200	474	0.87	0.51
Planning	3blocks	283	9690	26810	1.82	0.54	0.05	186	413	946	0.91	0.53	0.042994	188	419	1160	0.57	1.02
Planning	prob003.pddl	1413	29487	59481	6.00	0.67	0.45	874	2624	5414	1.04	1.10	0.336949	1083	1748	4458	1.08	0.38
Planning	bw_large.d	6325	131973	294118	119.28	7.69	1.08	6229	320	747	1.74	1.71	0.540917	6237	277	721	1.17	1.06
Planning	hanoi4	718	4934	12200	58.26	0.89	0.03	0	0	0	0.51	0.54	0.038994	718	0	0	0.62	0.62
Planning	prob001.pddl	939	3785	7727	0.67	0.61	0.01	685	531	1128	0.52	0.51	0.031995	730	444	1041	0.78	1.03
Planning	5step	177	475	959	0.62	0.50	0.00	143	32	64	0.49	0.48	0.000999	143	32	64	0.52	0.16
Planning	log-4	2303	20963	42581	28.86	4.96	0.29	1384	2893	6069	9.81	1.72	0.471928	1682	2071	4890	10.97	2.12
Planning	bw_large.b	1087	13772	31767	1.08	0.67	0.05	0	0	0	0.53	0.53	0.011998	1086	0	0	0.70	0.98
Planning	log-5	2701	29534	59897	212.44	25.06	1.29	1184	11551	23729	25.87	7.08	5.770123	1508	9501	21456	151.62	8.85
Planning	logistics.d	4713	21991	51347	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Planning	log-1	939	3785	7730	0.60	0.64	0.01	685	531	1128	0.81	0.50	0.092986	730	444	1041	0.86	0.83
Planning	log-3	1413	29487	59481	2.41	0.64	0.47	874	2624	5414	1.05	0.96	0.984851	1083	1748	4458	1.79	1.22
Planning	prob002.pddl	1337	24777	50017	2.26	0.91	0.49	699	4386	9008	1.55	1.02	1.536766	910	3096	7852	2.56	1.06
Planning	tire-4	812	3222	6629	0.74	0.64	0.02	660	268	599	0.77	0.53	0.061991	669	323	777	0.88	0.56
Planning	prob004-log-a	1790	18026	36732	5.07	1.80	0.23	1015	2528	5351	4.14	1.14	0.982850	1306	1735	4142	12.80	2.01
Circuit	2bitmax_6	252	766	1800	2.57	1.76	0.01	0	610	1344	1.09	1.38	0.127981	8	610	1456	2.43	1.09
Circuit	ssa7552-160	1391	3126	10151	0.63	0.34	0.02	1184	413	1236	0.31	0.99	0.207969	1207	331	1060	0.80	0.75
Circuit	ssa7552-159	1363	3032	9854	0.62	0.57	0.03	1159	391	1177	0.36	0.05	0.201969	1189	295	1039	0.81	0.81
Circuit	ssa7552-158	1363	3034	9861	0.61	0.41	0.02	1183	311	929	0.51	0.50	0.181973	1217	194	653	0.78	1.06
Circuit	ssa7552-038	1501	3575	11823	0.72	0.40	0.03	1234	532	1548	0.57	0.59	0.292956	1254	475	1531	1.29	0.15
Circuit	alu2_gr_rcs_w8.shuffled	4080	83902	170864	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	2bitmax_6	252	766	1800	2.57	1.76	0.01	0	610	1344	1.09	1.38	0.127981	8	610	1456	2.43	1.09
Circuit	2bitcomp_5	125	310	740	0.78	0.36	0.00	7	186	416	0.81	0.49	0.017997	15	182	453	0.72	0.51
Circuit	2bitadd_11	649	1562	4180	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	3bitadd_31	8432	31310	86676	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	3bitadd_32	8704	32316	89472	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	2bitadd_12	708	1702	4560	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	rb	1854	11324	27648	2.26	8.19	0.35	0	10494	21895	2.61	3.54	0.740888	0	10626	23186	3.57	6.47
Circuit	rc	2472	17942	40464	37.64	493.80	0.58	0	16770	34993	40.95	TO	1.332798	0	16870	35997	41.43	TO
Circuit	ra	1236	11416	22832	1.36	0.64	0.63	0	11416	22832	2.19	1.52	0.571913	0	11416	22832	1.96	1.05
Circuit	c880_gr_rcs_w7.shuffled	4592	61745	126770	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	3bitadd_32	8704	32316	89472	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Circuit	c880.isc	417	1060	2466	TO	TO	0.01	261	404	1141	15.97	4.32	0.013997	357	0	0	0.57	1.04
Circuit	c499.isc	243	714	1946	TO	TO	0.00	159	296	1160	0.74	1.11	0.038994	148	304	1072	114.74	TO
Circuit	c2670.isc	1230	2876	6634	TO	TO	0.06	770	977	2712	17.98	3.61	0.125980	907	492	1696	0.79	1.47
Circuit	c432.isc	196	514	1258	0.73	0.68	0.00	102	266	733	0.53	0.55	0.005999	160	0	0	0.63	1.09
Circuit	c7552.isc	3185	8588	19808	TO	TO	?	?	?	?	TO	TO	0.424936	2977	5	18	1.19	1.41
Circuit	c1908.isc	751	2053	4723	754.00	531.96	0.03	615	603	2082	216.72	176.73	0.037994	710	60	226	0.56	1.02
Circuit	c1355.isc	555	1546	3610	TO	TO	?	?	?	?	TO	TO	0.076988	461	304	1080	68.66	82.50
Circuit	s953.bench	417	1138	2624	1.00	0.32	0.09	269	522	1421	0.98	0.54	0.018997	394	2	4	0.53	1.00
Circuit	s820.bench	312	1046	2560	0.75	0.53	0.06	200	500	1505	0.88	0.53	0.013997	289	0	0	0.68	1.08
Circuit	s838.1.bench	512	1233	2807	0.58	0.50	0.06	419	164	480	0.88	0.60	0.021996	446	0	0	0.84	0.52
Circuit	s1488.bench	667	2040	4814	0.57	0.30	0.21	396	1151	3311	0.72	0.57	0.033994	653	0	0	0.52	0.71
Circuit	s1494.bench	661	2040	4826	0.57	0.49	0.15	493	701	2047	0.63	0.58	0.032994	647	0	0	0.68	1.00
Circuit	s1196.bench	560	1538	3556	0.79	0.50	0.11	388	625	1780	0.86	0.57	0.024996	529	0	0	0.83	0.05
Circuit	s510.bench	236	635	1483	0.57	0.52	0.04	121	380	1055	0.76	0.51	0.005999	211	0	0	0.49	0.02
Circuit	s526.bench	217	638	1528	0.59	0.26	0.01	153	209	618	0.84	0.47	0.004999	193	0	0	0.62	0.08
Circuit	s713.bench	447	984	2166	0.67	0.52	0.01	379	72	207	0.47	0.52	0.009998	393	0	0	0.76	1.00
Circuit	s526n.bench	218	639	1529	0.58	0.30	0.01	164	161	485	0.78	0.45	0.004999	194	0	0	0.90	0.04
Circuit	s832.bench	310	1056	2594	0.56	0.58	0.06	202	476	1427	0.89	0.52	0.013997	287	0	0	0.58	1.00
Circuit	s444.bench	205	533	1237	0.54	0.25	0.01	143	184	531	0.49	0.48	0.004999	181	0	0	0.72	0.05
Circuit	s400.bench	189	486	1130	0.60	0.24	0.01	156	37	105	0.71	0.52	0.002999	164	0	0	0.86	0.05
Circuit	s641.bench	433	918	1996	0.64	0.28	0.01	359	90	244	0.80	0.49	0.008998	379	0	0	0.53	0.12
Circuit	s420.1.bench	252	601	1367	0.61	0.24	0.02	181	190	519	0.50	0.54	0.005999	218	0	0	0.60	0.97
Circuit	s1423.bench	748	1821	4149	9.01	TO	0.04	568	398	1165	2.87	2.64	0.037994	655	21	104	0.71	1.05
Circuit	s1238.bench	539	1549	3631	1.48	0.85	0.15	288	929	2585	1.30	0.75	0.023996	508	0	0	0.75	0.98
Configuration	C169_FW	1411	1982	2786	0.33	0.45	0.00	1349	52	107	0.71	0.46	0.008998	1349	52	107	0.85	1.02
Configuration	C210_FW	2024	9705	40743	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Configuration	D1119_M20	1400	1698	2473	0.52	0.46	0.00	1356	83	215	0.70	0.53	0.005999	1356	83	217	0.50	0.05
Configuration	C169_FV	1411	1982	2786	0.53	0.25	0.00	1349	52	107	0.70	0.50	0.008998	1349	52	107	0.65	0.97
Configuration	C170_FR	1874	10610	49027	37.23	TO	0.17	1218	4715	19029	36.30	56.95	0.237964	1221	4666	19582	16.59	13.88
Configuration	C220_FV	1933	6580	22610	1084.56	TO	0.07	1197	2237	7392	610.39	115.90	0.203969	1202	2160	7327	322.97	181.73
Configuration	C638_FVK	1761	3162	6433	0.58	0.53	0.02	1279	737	1923	0.86	0.69	0.147978	1286	705	22419	1.02	1.66
Configuration	C163_FW	1815	4797	15866	2.17	2.52	0.05	1236	1440	5404	2.24	2.29	0.131980	1245	1278	4895	1.33	1.32
Configuration	C171_FR	1758	4005	9705	1.13	0.69	0.02	1295	1498	3035	0.91	0.77	0.087987	1297	1495	3031	1.16	1.00
Configuration	C129_FR	1888	7404	23769	71.49	42.46	0.08	1177	2711	8076	308.27	TO	0.190971	1180	2589	7701	162.90	11.58
Configuration	C203_FW	2030	7234	21289	237.10	254.10	0.06	1278	2122	6735	325.74	TO	0.190971	1284	1908	6096	73.03	21.72
Configuration	C215_FC	1848	4898	13032	6.55	59.74	0.05	1253	1861	6125	5.38	3.40	0.139979	1254	1770	5821	2.32	2.38
Configuration	C211_FW	1665	5929	16107	1.69	0.76	0.04	1290	1343	3156	1.49	1.40	0.081988	1290	1356	3214	1.27	1.57
Configuration	C209_FC	1922	4805	11802	25.82	15.29	0.05	1276	1924	5615	19.63	3.20	0.146977	1274	1931	5626	16.57	8.24
Configuration	C638_FKA	1787	7612	23876	3.01	1.19	0.05	1242	1110	2960	4.23	3.07	0.169975	1248	1084	23471	2.86	19.96
Configuration	C230_FR	1808	4767	12892	20.87	15.61	0.04	1267	1825	6033	11.42	TO	0.122982	1270	1770	5845	6.51	4.18
Configuration	C168_FW	1909	7477	29124	620.08	TO	0.10	1171	2494	7585	722.16	TO	0.228966	1173	2468	7600	402.79	TO
Configuration	C203_FS	1931	6275	18018	139.98	TO	0.05	1232	2118	6728	125.58	TO	0.173973	1237	1905	6095	54.93	21.60
Configuration	C140_FV	1843	8056	33705	21.94	22.67	0.08	1160	2115	6491	18.58	15.95	0.184972	1162	2117	6521	12.59	14.97
Configuration	C210_FS	1990	7982	29039	TO	TO	?	?	?	?	TO	TO	0.248962	1159	2824	8714	1478.22	322.20
Configuration	C210_FVF	1934	3985	10693	2.21	1.41	0.04	1296	1494	5115	1.86	1.13	0.144977	1297	1486	5088	1.42	1.30
Configuration	C202_FS	1990	8883	37292	1695.26	TO	0.11	1134	2869	9091	2955.33	TO	0.260961	1134	2810	9101	3423.60	TO
Configuration	C208_FA	1876	7219	29021	102.60	TO	0.07	1178	2868	8617	192.51	TO	0.184971	1180	2851	8582	201.48	TO
Configuration	C202_FW	2038	11342	47534	TO	TO	0.18	1099	3541	10494	3211.28	TO	0.341948	1097	3453	10426	2897.17	TO
Configuration	C638_FKB	1784	3774	7581	1.28	0.80	0.03	1255	1024	2648	1.77	0.85	0.173974	1165	2019	6443	28.31	8.47
Configuration	D1119_M23	1414	1997	3590	0.73	0.22	0.00	1358	75	194	0.70	0.45	0.006998	1358	76	202	0.69	1.01
Configuration	C203_FCL	1914	5225	12762	45.49	13.84	0.05	1269	1836	5878	15.77	5.73	0.148977	1269	1831	5866	11.90	6.79
Configuration	C140_FC	1828	5451	14572	11.69	2.59	0.05	1216	1781	5804	5.87	1.92	0.138978	1213	1777	5784	4.60	2.52
Configuration	C250_FW	1465	2356	3972	0.52	0.23	0.00	1310	161	346	0.71	0.44	0.023996	1310	162	350	0.60	0.13
Configuration	C208_FC	1922	7518	33439	359.67	TO	0.09	1158	2987	9042	579.01	TO	0.211968	1159	2978	9033	608.13	TO
Configuration	C209_FA	1885	4093	10283	2.73	1.76	0.04	1266	1592	4946	2.53	1.01	0.135980	1267	1591	4944	2.22	1.61
Configuration	C220_FW	1932	6631	22758	472.23	TO	0.07	1198	2194	7030	563.03	TO	0.195970	1201	2097	6740	398.59	TO
Configuration	C140_FW	1841	6306	19770	55.48	12.58	0.06	1162	2027	6440	37.65	8.91	0.173974	1165	2019	6443	28.31	8.47
Configuration	C250_FV	1465	2356	3972	0.52	0.48	0.00	1310	161	346	0.74	0.48	0.023996	1310	162	350	0.55	1.02
Configuration	C211_FS	1635	3662	7661	0.77	0.25	0.01	1332	427	1134	0.75	0.64	0.050992	1333	425	1139	0.75	1.04
Random	wff.3.150.525	150	525	1575	129.98	369.59	0.00	0	525	1575	128.61	378.25	0.022996	0	525	1575	130.02	380.88
Random	wff.3.100.150	100	150	450	3092.75	TO	0.00	0	150	450	3056.20	TO	0.000999	0	150	450	3140.79	TO
Random	wff.4.100.500	100	500	2000	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
Random	uf250-024	250	1065	3195	20.91	15.00	8.03	221	26	52	10.25	9.38	6.739975	219	30	60	7.34	7.75
Random	uf250-026	250	1065	3195	18.31	10.42	0.78	218	29	60	5.32	5.63	4.439325	218	29	60	4.97	5.27
Random	uf250-095	250	1065	3195	57.97	53.07	11.20	2	1043	3120	39.16	43.69	232.984580	2	1043	3120	257.93	255.86
Random	uf250-075	250	1065	3195	17.14	9.08	5.10	41	710	1984	6.16	5.87	9.266591	42	709	2002	9.93	9.80
Random	uf250-051	250	1065	3195	23.71	11.13	4.89	187	101	223	5.42	5.65	5.186211	171	130	301	5.72	5.58
Random	uf250-015	250	1065	3195	17.26	9.26	6.10	14	932	2742	8.20	7.07	13.926882	14	932	2743	15.95	14.12
Random	uf250-014	250	1065	3195	24.98	26.40	11.05	116	282	654	11.68	11.59	9.267591	91	410	1068	9.78	9.32
Random	uf250-062	250	1065	3195	19.13	11.69	3.87	209	39	81	5.73	5.42	3.768427	208	41	85	4.32	4.25
Random	uf250-09	250	1065	3195	10.93	6.59	4.02	181	113	253	4.74	4.43	4.410329	169	129	294	5.31	5.12
Random	uf250-060	250	1065	3195	18.80	13.92	7.55	187	97	211	9.97	10.12	7.641838	187	98	214	8.62	8.65

Benchmark Information					Σ		pmc(Σ)						B+E(Σ, $\mathcal{O}\infty$)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
Random	uf250-038	250	1065	3195	50.29	32.10	14.09	202	66	140	16.64	17.19	11.176301	196	74	161	11.66	12.07
Random	uf250-017	250	1065	3195	13.82	6.37	3.25	165	142	320	4.09	4.01	3.916404	156	156	363	4.66	12.62
Random	uf250-081	250	1065	3195	58.73	65.84	24.39	13	929	2730	29.16	26.56	63.843294	13	929	2731	68.39	66.62
Random	uf250-094	250	1065	3195	25.59	19.81	12.18	200	61	125	13.71	13.41	11.318279	196	67	138	12.12	12.19
Random	uf250-030	250	1065	3195	27.28	20.18	13.55	120	269	626	14.31	14.35	13.213991	104	352	884	13.81	14.09
Random	uf250-039	250	1065	3195	26.32	21.87	8.60	21	873	2544	10.38	9.69	10.906341	21	873	2545	12.39	31.85
Random	uf250-055	250	1065	3195	31.37	29.64	11.24	17	907	2639	12.79	12.15	22.591565	17	907	2640	24.05	23.65
Random	uf250-078	250	1065	3195	35.27	22.78	9.22	30	814	2330	10.59	10.28	16.784448	30	814	2332	17.68	17.90
Random	uf250-090	250	1065	3195	17.01	7.79	6.73	148	193	426	8.04	8.11	6.009086	134	216	500	6.83	5.90
Random	uf250-058	250	1065	3195	22.73	15.15	15.74	155	178	412	16.90	16.94	14.350818	75	482	1266	14.92	14.81
Random	uf250-054	250	1065	3195	17.36	7.50	3.72	240	2	4	6.20	5.87	4.361336	240	2	4	4.88	13.38
Random	uf250-08	250	1065	3195	87.70	18.36	9.01	26	834	2418	10.26	10.27	19.814987	26	834	2418	20.65	20.77
Random	uf250-070	250	1065	3195	22.52	9.80	8.49	149	187	412	9.16	9.84	5.565153	141	206	469	6.10	6.57
Random	uf250-041	250	1065	3195	14.20	6.03	1.80	175	122	266	3.03	3.25	2.260656	167	133	290	2.75	6.74
Random	uf250-043	250	1065	3195	15.91	8.27	5.78	221	18	36	8.18	8.23	4.737279	221	18	36	5.62	5.72
Random	uf250-037	250	1065	3195	69.29	75.76	4.45	0	1065	3195	75.00	83.37	314.021261	0	1065	3195	383.68	391.13
Random	uf250-076	250	1065	3195	24.34	11.89	8.67	213	33	69	10.24	10.45	7.744822	212	35	73	8.42	23.30
Random	uf250-098	250	1065	3195	21.86	15.89	10.93	73	443	1074	14.16	14.16	11.934185	58	590	1597	12.72	12.81
Random	uf250-02	250	1065	3195	31.59	19.58	1.62	210	47	104	5.25	6.81	4.497316	209	49	109	5.28	5.48
Random	uf250-057	250	1065	3195	19.25	11.16	10.06	139	199	439	10.39	10.18	8.724673	136	215	506	9.29	9.45
Random	uf250-0100	250	1065	3195	34.10	24.74	8.29	138	218	501	10.05	9.82	10.113462	116	301	740	10.67	10.78
Random	uf250-091	250	1065	3195	72.20	66.57	5.18	0	1065	3195	73.46	64.78	250.952849	0	1065	3195	321.37	309.11
Random	uf250-01	250	1065	3195	194.54	106.22	14.02	0	1065	3195	83.07	117.83	204.486913	0	1065	3195	272.81	302.32
Random	uf250-036	250	1065	3195	34.60	25.67	0.07	212	26	53	4.75	4.13	4.156368	212	26	53	4.72	5.20
Random	uf250-096	250	1065	3195	27.79	22.89	6.86	170	138	312	7.98	7.55	5.009238	164	142	325	5.83	6.08
Random	uf250-071	250	1065	3195	24.93	15.51	4.03	230	9	18	6.65	6.36	12.153152	230	9	18	13.02	12.70
Random	uf250-082	250	1065	3195	21.75	16.60	7.73	156	168	391	9.45	9.08	9.491557	143	193	471	9.99	9.62
Random	uf250-053	250	1065	3195	16.80	11.74	6.70	161	161	358	9.26	9.03	6.573000	153	176	403	7.09	6.92
Random	uf250-020	250	1065	3195	20.59	11.91	7.12	176	102	220	9.22	9.28	6.091074	176	102	220	6.58	7.04
Random	uf250-084	250	1065	3195	60.31	46.89	18.66	41	728	1996	19.48	19.31	64.018267	44	734	2044	64.72	66.04
Random	uf250-012	250	1065	3195	11.99	4.04	3.69	107	314	729	4.23	4.48	2.185667	97	342	839	2.73	7.24
Random	uf250-042	250	1065	3195	38.03	31.14	11.50	15	923	2692	13.78	12.29	20.658859	16	922	2691	22.70	21.90
Random	uf250-046	250	1065	3195	18.95	11.26	8.28	52	610	1635	9.75	9.52	9.250593	60	602	1656	9.85	10.08
Random	uf250-027	250	1065	3195	17.67	8.20	4.02	156	151	335	5.54	5.05	5.281197	153	156	353	5.78	6.04
Random	uf250-068	250	1065	3195	32.12	19.39	10.14	29	819	2362	11.04	10.79	16.812444	31	818	2367	17.98	49.92
Random	uf250-089	250	1065	3195	33.43	16.50	8.16	26	835	2398	9.79	9.85	9.665530	29	833	2410	10.41	11.00
Random	uf250-045	250	1065	3195	9.88	4.60	3.76	214	40	82	5.10	5.04	4.171365	211	45	94	5.01	4.23
Random	uf250-074	250	1065	3195	25.28	16.74	10.47	43	717	2002	11.77	11.81	11.929186	44	716	2012	12.75	13.00
Random	uf250-066	250	1065	3195	52.60	47.59	17.89	18	894	2613	19.71	19.46	19.893975	18	894	2613	21.27	22.26
Random	uf250-052	250	1065	3195	17.50	10.40	5.63	189	85	184	7.24	7.01	5.896103	182	94	206	6.01	6.00
Random	uf250-010	250	1065	3195	28.01	17.24	14.59	119	275	634	15.65	15.00	10.630383	85	459	1211	11.16	10.66
Random	uf250-087	250	1065	3195	37.56	28.71	22.61	160	154	336	24.25	24.01	12.480102	147	175	400	13.06	13.40
Random	uf250-093	250	1065	3195	11.98	6.97	3.78	221	30	61	4.80	4.28	2.904558	221	30	61	3.39	2.96
Random	uf250-011	250	1065	3195	44.34	26.99	14.32	228	13	26	19.36	19.51	12.308128	228	13	26	12.90	12.60
Random	uf250-031	250	1065	3195	52.22	34.34	22.40	175	133	302	23.19	22.82	23.776385	161	147	344	24.35	24.62
Random	uf250-063	250	1065	3195	28.28	15.60	9.62	119	294	686	10.84	10.57	11.983178	114	308	752	12.53	12.95
Random	uf250-03	250	1065	3195	21.24	10.21	7.61	162	138	300	8.73	7.91	6.359033	160	147	331	7.22	7.32
Random	uf250-067	250	1065	3195	36.85	5.03	3.12	200	52	110	4.49	4.50	2.894559	199	54	115	2.93	8.83
Random	uf250-05	250	1065	3195	18.92	10.65	9.78	195	73	151	13.95	13.56	9.325582	189	82	171	9.45	10.50
Random	uf250-099	250	1065	3195	29.47	15.74	5.88	191	80	173	8.16	7.60	5.952095	187	85	184	6.49	6.95
Random	uf250-035	250	1065	3195	36.82	34.49	11.22	4	1020	3046	28.95	23.68	62.971426	4	1020	3046	79.56	83.09
Random	uf250-013	250	1065	3195	15.35	6.68	3.56	181	95	197	5.62	5.60	3.748430	182	95	198	3.88	3.79
Random	uf250-064	250	1065	3195	13.17	8.69	4.47	19	906	2627	5.42	5.17	4.363336	19	907	2642	5.46	4.57
Random	uf250-056	250	1065	3195	32.00	31.52	18.91	91	345	800	19.76	19.46	22.475583	56	629	1730	23.53	22.63
Random	uf250-028	250	1065	3195	44.28	12.40	8.43	176	114	240	10.41	11.00	7.511858	170	124	273	8.11	22.60
Random	uf250-083	250	1065	3195	28.86	22.88	7.67	24	856	2463	8.24	8.20	13.800901	25	856	2482	14.61	14.53
Random	uf250-034	250	1065	3195	21.24	10.49	8.41	223	12	25	11.24	11.56	7.202904	223	12	25	7.93	7.99
Random	uf250-029	250	1065	3195	28.46	23.99	14.63	229	7	14	18.37	17.42	15.250681	229	7	14	15.89	16.54
Random	uf250-033	250	1065	3195	43.55	41.68	21.23	13	948	2796	23.89	22.80	44.999159	13	948	2798	47.11	44.73
Random	uf250-07	250	1065	3195	32.73	19.86	7.24	214	27	57	12.04	11.91	11.054319	214	27	57	11.58	12.01
Random	uf250-061	250	1065	3195	11.43	6.07	1.79	123	256	586	3.27	2.71	2.422631	120	278	668	3.18	8.16
Random	uf250-016	250	1065	3195	28.95	16.19	12.94	14	933	2746	15.24	14.69	14.341819	14	933	2746	16.30	15.84
Random	uf250-097	250	1065	3195	14.10	6.37	5.51	177	122	276	6.51	5.81	5.578151	158	156	361	6.12	6.31
Random	uf250-077	250	1065	3195	56.99	8.53	6.53	166	152	344	7.34	7.13	8.436717	153	184	445	9.16	8.84
Random	uf250-032	250	1065	3195	26.77	21.96	16.71	204	47	95	20.00	20.42	11.576240	204	47	95	12.37	33.86
Random	uf250-025	250	1065	3195	35.62	28.73	11.61	16	913	2680	14.57	13.74	29.227556	16	914	2690	31.22	30.46
Random	uf250-065	250	1065	3195	29.20	20.87	15.60	145	203	444	16.95	16.98	16.741454	117	297	713	17.30	16.84
Random	uf250-050	250	1065	3195	10.91	5.81	3.37	160	162	361	4.41	4.30	5.510162	140	201	466	6.04	17.29
Random	uf250-048	250	1065	3195	20.95	12.85	5.81	123	254	584	7.35	7.03	6.450019	93	369	941	6.96	7.38
Random	uf250-085	250	1065	3195	20.10	12.56	5.59	23	869	2521	6.93	6.12	7.449867	23	869	2526	8.28	8.56
Random	uf250-044	250	1065	3195	21.03	18.58	10.24	6	1007	2992	16.49	13.14	25.956054	6	1007	2992	33.26	29.48
Random	uf250-022	250	1065	3195	23.59	13.93	9.84	222	17	34	10.90	11.02	12.185147	222	17	34	12.74	13.73
Random	uf250-059	250	1065	3195	18.91	13.36	8.60	161	151	331	9.38	9.14	7.038929	149	168	377	7.55	8.14
Random	uf250-088	250	1065	3195	39.43	32.39	24.13	16	921	2703	26.53	25.66	62.438507	18	919	2713	64.70	64.68
Random	uf250-072	250	1065	3195	15.23	9.64	1.45	225	17	37	4.06	3.94	2.645597	225	17	37	3.32	3.51
Random	uf250-049	250	1065	3195	40.56	44.87	11.05	3	1026	3065	35.66	31.71	79.538908	3	1027	3069	106.42	269.35
Random	uf250-040	250	1065	3195	51.70	11.33	6.21	142	201	455	7.75	7.20	6.099072	119	275	685	6.98	6.83
Random	uf250-086	250	1065	3195	26.37	12.96	9.55	215	29	61	11.76	11.12	9.085618	215	29	61	10.03	10.14
Random	uf250-06	250	1065	3195	40.84	30.97	9.45	10	968	2864	13.06	10.95	32.256096	10	968	2865	35.74	34.35
Random	uf250-092	250	1065	3195	19.06	10.98	8.70	152	143	320	10.54	9.95	8.589694	149	150	349	9.30	9.31
Random	uf250-080	250	1065	3195	19.33	11.72	6.69	188	89	190	7.97	7.63	5.537158	180	100	216	6.10	5.54
Random	uf250-079	250	1065	3195	59.36	43.05	18.44	31	803	2310	19.91	19.56	39.501994	32	802	2308	40.13	40.83
Random	uf250-047	250	1065	3195	36.26	28.20	8.40	19	881	2557	9.81	10.07	26.141025	20	880	2561	27.00	73.93
Random	uf250-021	250	1065	3195	118.46	195.00	8.70	0	1065	3195	103.43	226.72	374.956997	0	1065	3195	495.99	570.02
Random	uf250-018	250	1065	3195	16.48	8.55	11.53	183	97	207	12.82	12.43	7.722825	180	100	217	8.59	8.58
Random	uf250-073	250	1065	3195	194.29	64.50	26.10	6	1019	3030	41.46	34.47	101.553561	6	1019	3032	115.89	109.59
Random	uf250-019	250	1065	3195	50.22	74.08	11.66	5	1016	3030	31.54	33.30	43.957317	5	1016	3030	64.05	60.51
Random	uf250-069	250	1065	3195	35.03	24.27	21.99	63	574	1532	24.00	23.96	14.112854	66	571	1543	14.71	14.14
Random	uf250-04	250	1065	3195	62.07	78.89	8.70	1	1053	3155	53.51	56.09	117.141191	1	1053	3155	160.50	155.91
Random	uf250-023	250	1065	3195	24.60	13.66	8.72	127	253	577	10.49	10.29	7.420871	87	414	1060	8.27	8.31
Random	wff.3.75.315	75	315	945	0.59	0.21	0.00	65	9	18	0.38	0.45	0.000999	64	11	22	0.52	0.62
BMC	bmc-ibm-7	8710	39774	101779	TO	TO	0.46	7886	2688	7418	2697.76	452.24	0.818875	8213	1386	4586	86.92	29.77
BMC	cnt06.shuffled	762	2469	6753	1.34	0.20	0.01	0	0	0	0.67	0.46	0.007999	762	0	0	0.48	1.07
BMC	bmc-ibm-10	59056	327IO	834093	TO	227.97	4.44	57956	2966	8371	5.78	6.32	8.164759	58415	1174	3828	8.95	9.56
BMC	cnt09.shuffled	9207	30678	83822	TO	TO	0.21	0	0	0	3.26	3.00	2.447627	9207	0	0	3.03	3.53
BMC	bmc-ibm-11	32109	150027	394770	1430.60	303.00	12.90	29962	8244	24178	2457.46	TO	16.736456	30942	4998	16400	132.08	749.57
BMC	bmc-ibm-1	9685	55870	149914	15.40	2.14	1.21	7926	2855	7370	2.19	2.21	2.527616	8500	884	2892	3.11	3.67
BMC	bmc-galileo-9	63624	326999	852078	313.56	42.24	87.74	45854	93463	260369	140.41	93.33	39.947927	62358	5224	16810	41.00	43.61
BMC	bmc-ibm-13	13215	65728	174164	TO	114.12	2.68	12900	745	2105	5.34	5.20	4.121373	13070	19	114	4.67	5.19
BMC	bmc-ibm-2	2810	11683	29407	0.73	1.02	0.03	2717	85	213	0.76	0.53	0.054992	2723	55	144	0.85	1.01
BMC	bmc-ibm-12	39598	194778	515536	302.26	15.52	4.24	38378	3531	10569	159.02	16.07	5.583151	39148	338	1037	6.23	7.03
BMC	bmc-ibm-3	14930	72106	189182	52.13	1.81	0.42	14864	14	48	1.28	0.94	0.188971	14864	12	42	0.68	0.36
BMC	bmc-ibm-4	28161	139716	366895	TO	3.24	6.63	27376	1387	3693	8.98	3.25	1.702741	27866	148	518	2.57	2.57
BMC	bmc-ibm-6	51639	368352	1007089	TO	TO	5.34	50205	1639	4578	6.58	6.78	15.038714	50605	121	386	15.91	16.55
BMC	bmc-ibm-5	9396	41207	105281	431.55	7.03	0.71	7981	3663	10099	5.11	2.56	1.427783	8547	1405	4681	2.39	1.91
BMC	cnt07.shuffled	1786	5856	16016	8.48	2.11	0.05	0	0	0	0.48	0.52	0.046993	1785	0	0	0.55	0.19
BMC	bmc-galileo-8	58074	294821	767187	233.93	132.92	53.19	53623	19285	51826	55.62	58.68	34.482757	56474	7122	22527	35.89	37.70
BMC	cnt10.shuffled	20470	68561	187229	TO	TO	2.77	0	0	0	17.71	16.05	16.009566	20470	0	0	16.76	17.15
BMC	cnt08.shuffled	4089	13531	36991	122.45	471.05	0.43	0	0	0	2.13	0.90	0.316952	4088	0	0	0.83	0.48
BN	blockmap_10_02.net	12562	26022	53076	0.85	0.99	1.11	11838	2475	6596	1.90	1.71	1.423784	12470	122	278	1.91	2.48
BN	blockmap_05_03.net	2055	4143	8421	0.54	0.60	0.05	1953	239	626	0.32	0.67	0.088987	1989	78	177	0.60	1.04
BN	blockmap_15_03.net	37709	78239	159611	6.13	42.82	23.57	37485	407	999	24.24	9.24	14.202841	37493	288	657	14.86	14.80
BN	fs-13.net	21788	37154	84578	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	blockmap_22_01.net	108698	224008	454771	1.82	38.19	126.05	106791	5123	13462	126.87	131.84	142.776294	108578	208	484	143.76	147.32
BN	blockmap_22_03.net	119003	247486	504902	74.13	1075.92	82.89	113729	18167	47548	86.43	90.36	120.777639	118694	411	936	122.17	117.76
BN	mastermind_06_08_03.net	3979	8833	19324	5.66	TO	0.31	2940	2699	7077	2.48	2.65	0.747887	3412	702	1566	1.25	1.54
BN	fs-07.net	3710	6104	13706	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	mastermind_04_08_04.net	5484	12596	27360	21.35	TO	1.26	4421	3242	8772	19.08	6.65	0.997848	5088	432	936	1.51	1.95
BN	blockmap_15_02.net	35386	72866	148028	7.82	TO	19.24	35218	358	913	20.20	7.53	11.359273	35242	192	436	12.10	33.90
BN	mastermind_05_08_03.net	3502	7816	17038	2.77	TO	0.24	2705	2116	5647	1.63	1.21	0.528920	3070	513	1134	1.09	0.63
BN	blockmap_20_03.net	86889	178682	362676	29.16	401.12	34.43	85736	3585	9385	35.75	39.70	58.226148	86610	369	840	58.99	64.59
BN	fs-29.net	229100	399794	918082	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	blockmap_05_02.net	1738	3452	6942	0.77	0.22	0.10	1673	141	363	0.62	0.95	0.060990	1690	66	150	0.96	1.03
BN	blockmap_10_03.net	13786	28826	59113	1.65	4.87	3.60	13116	2185	5793	4.62	1.84	1.846719	13645	183	417	2.39	2.89
BN	blockmap_10_01.net	11328	23175	46933	0.56	0.91	5.97	10870	1289	3464	6.75	2.52	1.740735	11276	79	181	2.28	2.60
BN	mastermind_03_08_04.net	4720	10920	23608	3.75	TO	0.73	3919	2533	6799	3.82	1.50	0.631904	4504	180	396	1.10	1.57
BN	blockmap_20_01.net	78650	160055	322994	1.59	14.64	49.37	77994	1998	5336	50.26	50.03	76.281403	78544	175	406	77.10	80.82
BN	fs-10.net	10220	17210	38990	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	fs-22.net	101420	175934	403106	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	blockmap_15_01.net	33035	67424	136296	0.74	5.06	7.95	32963	118	273	8.66	8.74	12.742063	32956	132	323	13.29	13.56
BN	blockmap_05_01.net	1411	2737	5413	0.46	0.20	0.03	1372	92	247	0.72	0.47	0.042993	1391	28	63	0.58	0.98
BN	blockmap_20_02.net	82786	169415	342931	7.50	42.35	30.24	81786	3304	8776	31.15	32.30	53.593853	82593	316	768	54.56	56.63
BN	fs-01.net	32	38	74	0.49	0.44	0.00	19	12	28	0.73	0.45	0	19	12	28	0.53	0.93
BN	fs-16.net	39872	68528	156464	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO

Benchmark Information					Σ		pmc(Σ)						B+E(Σ, ∞)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
BN	blockmap_22_02.net	113870	235801	479949	36.37	118.71	61.68	109076	16916	44437	63.30	69.95	97.910117	113653	350	828	98.79	99.28
BN	fs-19.net	65930	113924	260642	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	mastermind_10_08_03.net	5887	12901	28468	45.26	TO	0.85	4100	4497	11791	19.26	TO	2.062687	4780	1458	3294	2.76	3.08
BN	mastermind_03_08_05.net	7564	17690	38302	44.15	TO	0.55	6315	4210	11219	13.21	11.66	1.564762	7294	225	486	2.47	2.58
BN	fs-25.net	147800	257150	589850	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	fs-28.net	206528	360164	826868	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	sat-grid-pbl-0010	110	191	738	0.62	0.50	0.00	8	71	188	0.71	0.40	0.003999	8	157	587	0.63	0.99
BN	sat-grid-pbl-0025	650	1226	4848	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	sat-grid-pbl-0015	240	436	1708	TO	TO	0.03	8	166	456	0.87	0.42	?	?	?	?	TO	447.06
BN	sat-grid-pbl-0020	420	781	3078	TO	TO	0.09	8	345	1041	106.52	4.37	?	?	?	?	TO	TO
BN	sat-grid-pbl-0030	930	1771	7018	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-22-9-q	2332	3696	7745	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	452.32
BN	75-14-9-q	924	1456	3349	TO	21.05	0.05	87	574	1964	583.47	TO	0.159975	90	526	1773	965.27	211.41
BN	75-17-9-q	1377	2176	4565	TO	346.61	0.09	168	626	2125	1693.23	77.24	0.316951	218	361	1262	5.46	2.74
BN	75-24-9-q	2784	4416	9149	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-19-9-q	1729	2736	5685	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-15-9-q	1065	1680	3413	1465.56	23.31	0.15	134	480	1633	11.93	5.79	0.184971	147	372	1259	6.79	26.32
BN	75-23-9-q	2553	4048	8349	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-18-9-q	1548	2448	4985	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-26-9-q	3276	5200	11205	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-20-9-q	1920	3040	6349	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-25-9-q	3025	4800	9945	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-12-9-q	672	1056	2173	6.32	0.65	0.02	90	274	920	0.36	0.60	0.073988	103	204	710	0.71	1.21
BN	75-16-9-q	1216	1920	4321	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	75-10-9-q	460	720	1533	1.62	1.11	0.01	52	263	910	0.79	0.73	0.036994	53	243	827	0.60	1.05
BN	90-10-9-q	460	720	1261	0.34	0.43	0.01	83	83	276	0.62	0.44	0.027995	98	15	88	0.76	0.15
BN	90-30-9-q	4380	6960	12089	TO	67.90	0.89	742	744	2382	10.13	2.05	2.873563	835	284	905	3.38	3.85
BN	90-22-9-q	2332	3696	6421	53.16	0.58	0.24	412	331	1044	0.92	1.50	0.743887	482	21	74	1.25	1.69
BN	90-16-9-q	1216	1920	3485	1.02	0.51	0.07	200	253	809	0.73	0.50	0.216967	226	146	502	0.67	1.15
BN	90-17-9-q	1377	2176	3881	0.70	0.48	0.09	233	266	859	0.74	0.39	0.283956	251	166	524	1.09	0.32
BN	90-14-9-q	924	1456	2585	0.47	0.41	0.04	171	123	403	0.70	0.58	0.110983	196	10	36	0.62	1.04
BN	90-38-9-q	7068	11248	18893	TO	5.82	2.35	1273	786	2480	8.54	5.16	7.587848	1443	0	0	8.36	8.34
BN	90-46-9-q	10396	16560	28417	TO	TO	?	?	?	?	TO	TO	16.368512	1977	697	2379	2757.86	TO
BN	90-25-9-q	3025	4800	8565	TO	40.60	0.47	483	697	2279	25.35	3.71	1.454779	559	326	1095	1.74	2.47
BN	90-18-9-q	1548	2448	4149	1.08	0.41	0.10	294	155	527	0.74	0.64	0.302953	319	31	111	0.45	1.27
BN	90-24-9-q	2784	4416	7421	235.82	1.21	0.36	499	344	1064	1.23	1.14	1.144825	544	148	477	1.73	2.07
BN	90-34-9-q	5644	8976	15377	TO	29.37	1.54	963	917	2946	4.75	2.51	4.921252	1145	52	182	5.80	5.87
BN	90-21-9-q	2121	3360	5829	32.82	0.49	0.20	372	332	1075	0.92	0.76	0.624905	440	4	14	1.10	1.55
BN	90-20-9-q	1920	3040	5165	7.29	0.54	0.16	345	261	842	0.84	0.86	0.514921	369	154	548	1.04	0.56
BN	90-50-9-q	12300	19600	34149	TO	TO	?	?	?	?	TO	TO	25.433134	2346	703	2326	40.49	27.47
BN	90-42-9-q	8652	13776	24061	TO	TO	?	?	?	?	TO	85.09	12.178149	1676	421	1406	17.07	15.79
BN	50-18-9-q	1548	2448	6405	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	50-10-9-q	460	720	1921	TO	1149.58	0.01	32	412	1508	65.54	28.28	0.043993	43	334	1228	64.43	20.24
BN	50-20-9-q	1920	3040	8009	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	50-12-9-q	672	1056	2917	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	50-14-9-q	924	1456	4077	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	50-16-9-q	1216	1920	5561	TO	TO	?	?	?	?	TO	TO	?	?	?	?	TO	TO
BN	or-50-5-4-UC-10	100	250	653	1.88	1.29	0.00	54	2	8	0.62	0.44	0.000999	54	2	8	0.52	0.92
BN	or-50-5-10-UC-10	100	250	656	0.41	0.52	0.00	0	0	0	0.59	0.51	0	68	0	0	0.64	1.07
BN	or-50-20-2-UC-10	100	250	652	4.26	2.78	0.00	50	2	8	0.60	0.53	0.000999	50	2	8	0.77	0.02
BN	or-50-5-2-UC-10	100	250	654	1.72	1.17	0.00	59	1	3	0.67	0.48	0.000999	59	1	3	0.90	0.91
BN	or-50-5-1-UC-10	100	250	653	0.57	0.51	0.00	58	1	4	0.64	0.45	0	58	1	4	0.51	0.02
BN	or-50-5-3-UC-10	100	250	659	0.41	0.48	0.00	71	2	6	0.64	0.45	0.000999	71	2	6	0.63	0.90
BN	or-50-10-4-UC-10	100	250	655	0.65	0.57	0.00	61	2	7	0.63	0.47	0.000999	61	2	7	0.76	0.92
BN	or-50-20-10-UC-10	100	250	658	0.67	0.62	0.00	61	5	16	0.62	0.46	0.000999	61	5	16	0.89	0.85
BN	or-50-20-8-UC-10	100	250	656	0.53	0.49	0.00	66	1	3	0.65	0.44	0	66	1	3	0.51	0.92
BN	or-50-5-8-UC-10	100	250	654	1.06	0.60	0.00	62	1	4	0.60	0.43	0.000999	62	1	4	0.64	0.90
BN	or-50-20-9-UC-10	100	250	656	1.62	1.09	0.00	57	3	8	0.65	0.67	0.000999	57	3	8	0.77	0.97
BN	or-50-5-6-UC-10	100	250	656	0.41	0.45	0.00	0	0	0	0.60	0.44	0.000999	71	0	0	0.90	0.01
BN	or-50-10-10-UC-10	100	250	655	0.69	0.45	0.00	0	0	0	0.60	0.43	0.000999	68	0	0	0.50	0.17
BN	or-50-10-2-UC-10	100	250	657	0.72	0.46	0.00	67	2	7	0.62	0.48	0.000999	67	2	7	0.63	0.91
BN	or-50-10-5-UC-10	100	250	656	0.56	0.53	0.00	60	2	7	0.64	0.44	0.000999	60	2	7	0.77	0.96
BN	or-50-10-1-UC-10	100	250	655	0.81	0.66	0.00	60	2	6	0.65	0.44	0.000999	60	2	6	0.91	0.92
BN	or-50-10-3-UC-10	100	250	657	0.52	0.53	0.00	62	4	12	0.64	0.44	0.000999	62	4	12	0.51	0.97
BN	or-50-20-4-UC-10	100	250	655	0.72	0.40	0.00	60	2	8	0.60	0.51	0.000999	60	2	8	0.64	0.92
BN	or-50-5-5-UC-10	100	250	653	2.45	1.51	0.00	54	2	8	0.61	0.47	0.000999	54	2	8	0.77	0.98
BN	or-50-10-6-UC-10	100	250	655	0.53	0.52	0.00	65	1	4	0.58	0.52	0.000999	65	1	4	0.90	0.90
BN	or-50-20-1-UC-10	100	250	654	3.01	1.97	0.00	54	3	11	0.64	0.49	0.000999	54	3	11	0.52	0.94
BN	or-50-20-7-UC-10	100	250	655	0.92	0.59	0.00	61	2	7	0.62	0.47	0.000999	61	2	7	0.65	0.92
BN	or-50-20-5-UC-10	100	250	654	1.15	0.24	0.00	58	2	8	0.60	0.57	0.000999	58	2	8	0.79	0.96
BN	or-50-5-7-UC-10	100	250	653	1.81	0.66	0.00	58	1	4	0.57	0.45	0.000999	58	1	4	0.48	0.93
BN	or-50-20-6-UC-10	100	250	655	0.96	0.40	0.00	58	3	10	0.66	0.45	0.000999	58	3	10	0.61	0.98
BN	or-50-10-8-UC-10	100	250	655	0.42	0.14	0.00	0	0	0	0.63	0.44	0.000999	70	0	0	0.74	0.97
BN	or-50-10-9-UC-10	100	250	653	0.76	1.30	0.00	58	1	4	0.61	0.70	0.000999	58	1	4	0.87	0.98
BN	or-50-5-9-UC-10	100	250	655	0.87	0.14	0.00	62	1	3	0.57	0.45	0.000999	62	1	3	0.47	0.80
BN	or-50-10-7-UC-10	100	250	654	4.01	2.02	0.00	54	3	12	0.63	0.44	0.000999	54	3	12	0.60	0.87
BN	or-50-20-3-UC-10	100	250	657	1.92	1.47	0.00	54	6	23	0.59	0.72	0.000999	54	6	23	0.73	0.97
BN	or-60-5-10-UC-10	120	300	789	0.85	0.50	0.00	80	3	10	0.81	0.44	0.000999	80	3	10	0.86	1.00
BN	or-60-20-3-UC-10	120	300	790	0.89	0.54	0.00	77	5	16	0.59	0.50	0.000999	77	5	16	0.46	0.06
BN	or-60-20-8-UC-10	120	300	787	2.29	1.23	0.00	68	5	17	0.64	0.46	0.000999	68	5	17	0.59	0.13
BN	or-60-5-5-UC-10	120	300	785	0.61	0.56	0.00	76	1	4	0.60	0.46	0.000999	76	1	4	0.72	0.90
BN	or-60-20-2-UC-10	120	300	785	10.28	4.83	0.00	67	3	11	0.59	0.43	0.001999	67	3	11	0.85	0.95
BN	or-60-10-10-UC-10	120	300	784	5.30	3.05	0.00	68	2	8	0.62	0.45	0.001999	68	2	8	0.46	0.02
BN	or-60-10-9-UC-10	120	300	786	0.81	0.44	0.00	0	0	0	0.59	0.45	0.000999	81	0	0	0.59	0.07
BN	or-60-10-2-UC-10	120	300	785	1.77	1.27	0.00	72	2	7	0.60	0.65	0.000999	72	2	7	0.71	0.07
BN	or-60-5-3-UC-10	120	300	783	7.93	5.23	0.00	68	1	4	0.62	0.67	0.001999	68	1	4	0.84	0.14
BN	or-60-10-1-UC-10	120	300	785	9.86	5.10	0.00	71	2	8	0.62	0.48	0.001999	71	2	8	0.43	0.92
BN	or-60-5-6-UC-10	120	300	786	1.20	0.80	0.00	0	0	0	0.61	0.48	0.000999	78	0	0	0.56	1.06
BN	or-60-5-8-UC-10	120	300	784	4.36	2.56	0.00	71	1	3	0.60	0.43	0.001999	71	1	3	0.69	0.03
BN	or-60-10-7-UC-10	120	300	786	1.12	1.01	0.00	76	1	3	0.61	0.43	0.000999	76	1	3	0.82	0.92
BN	or-60-20-5-UC-10	120	300	785	20.23	9.22	0.00	64	4	16	0.79	0.46	0.001999	64	4	16	0.52	0.96
BN	or-60-20-9-UC-10	120	300	786	1.02	0.81	0.00	75	2	5	0.67	0.46	0.000999	75	2	5	0.65	0.03
BN	or-60-20-7-UC-10	120	300	785	13.87	5.79	0.00	68	3	12	0.64	0.50	0.000999	68	3	12	0.48	0.92
BN	or-60-10-6-UC-10	120	300	785	8.00	5.72	0.00	68	3	12	0.63	0.52	0.001999	68	3	12	0.78	0.98
BN	or-60-5-1-UC-10	120	300	788	0.49	0.39	0.00	81	2	5	0.60	0.64	0.000999	81	2	5	0.62	0.05
BN	or-60-10-4-UC-10	120	300	785	0.91	0.71	0.00	0	0	0	0.64	0.66	0.000999	78	0	0	0.91	0.30
BN	or-60-5-7-UC-10	120	300	788	0.76	0.47	0.00	81	1	3	0.60	0.46	0.000999	81	1	3	0.50	0.37
BN	or-60-20-10-UC-10	120	300	785	6.39	3.50	0.00	67	3	11	0.60	0.46	0.000999	67	3	11	0.56	0.44
BN	or-60-5-4-UC-10	120	300	787	0.79	0.53	0.00	81	1	2	0.61	0.51	0	81	1	2	0.46	0.98
BN	or-60-10-8-UC-10	120	300	788	0.43	0.47	0.00	82	2	6	0.63	0.53	0.000999	82	2	6	0.53	0.04
BN	or-60-10-3-UC-10	120	300	783	12.81	7.26	0.00	67	1	4	0.61	0.65	0.000999	67	1	4	0.60	0.10
BN	or-60-10-5-UC-10	120	300	788	0.55	0.44	0.00	76	3	8	0.67	0.67	0.000999	76	3	8	0.67	0.91
BN	or-60-20-1-UC-10	120	300	784	5.32	2.86	0.00	64	3	9	0.59	0.48	0.001999	64	3	9	0.75	0.96
BN	or-60-5-2-UC-10	120	300	785	0.70	0.86	0.00	75	1	4	0.84	0.47	0.000999	75	1	4	0.82	1.01
BN	or-60-20-4-UC-10	120	300	786	12.17	8.33	0.00	64	5	20	0.62	0.66	0.001999	64	5	20	0.45	0.56
BN	or-60-5-9-UC-10	120	300	785	0.98	0.48	0.00	0	0	0	0.65	0.67	0.000999	79	0	0	0.51	0.62
BN	or-60-20-6-UC-10	120	300	788	24.48	8.99	0.00	64	7	27	0.19	0.66	0.000999	64	7	27	0.59	0.72
BN	or-100-20-8-UC-10	200	500	1310	TO	TO	0.00	115	6	19	0.67	0.68	0.003999	115	6	19	0.65	0.91
BN	or-100-10-6-UC-10	200	500	1305	1800.70	TO	0.00	0	0	0	0.56	0.47	0.003999	118	0	0	0.73	0.97
BN	or-100-10-1-UC-10	200	500	1310	265.44	173.93	0.00	123	3	11	0.61	0.47	0.003999	123	3	11	0.80	0.07
BN	or-100-20-3-UC-10	200	500	1304	TO	TO	0.00	108	2	8	0.57	0.47	0.004999	108	2	8	0.52	0.96
BN	or-100-5-4-UC-10	200	500	1310	1088.25	TO	0.00	122	3	9	0.62	0.47	0.002999	122	3	9	0.59	0.02
BN	or-100-20-6-UC-10	200	500	1308	TO	TO	0.00	114	4	14	0.59	0.47	0.003999	114	4	14	0.67	0.09
BN	or-100-20-2-UC-10	200	500	1312	579.60	TO	0.00	123	4	14	0.64	0.47	0.002999	123	4	14	0.74	0.98
BN	or-100-10-10-UC-10	200	500	1310	1829.62	TO	0.00	116	6	22	0.66	0.47	0.002999	116	6	22	0.81	0.05
BN	or-100-10-5-UC-10	200	500	1307	2695.79	TO	0.00	118	2	7	0.63	0.47	0.003999	118	2	7	0.88	0.15
BN	or-100-10-9-UC-10	200	500	1309	TO	TO	0.00	110	6	23	0.60	0.45	0.003999	110	6	23	0.51	0.93
BN	or-100-10-7-UC-10	200	500	1311	1288.72	TO	0.00	118	5	17	0.86	0.47	0.002999	118	5	17	0.57	0.99
BN	or-100-20-7-UC-10	200	500	1313	TO	TO	0.00	121	7	21	0.89	0.49	0.003999	121	7	21	0.65	0.08
BN	or-100-20-5-UC-10	200	500	1309	TO	TO	0.00	119	4	15	0.64	0.49	0.003999	119	4	15	0.72	0.92
BN	or-100-10-8-UC-10	200	500	1309	402.68	243.69	0.00	124	2	6	0.86	0.65	0.002999	124	2	6	0.79	0.98
BN	or-100-10-3-UC-10	200	500	1308	3242.35	TO	0.00	121	2	6	0.72	0.67	0.003999	121	2	6	0.86	0.08
BN	or-100-5-6-UC-10	200	500	1310	10.84	8.73	0.00	0	0	0	0.80	0.49	0.002999	130	0	0	0.47	0.98
BN	or-100-5-3-UC-10	200	500	1313	1.59	1.00	0.00	0	0	0	0.75	0.49	0.002999	137	0	0	0.54	1.04
BN	or-100-5-5-UC-10	200	500	1308	TO	TO	0.00	114	4	16	0.36	0.49	0.003999	114	4	16	0.61	0.04
BN	or-100-20-4-UC-10	200	500	1313	TO	TO	0.00	119	8	26	0.19	0.48	0.003999	119	8	26	0.68	0.28
BN	or-100-10-4-UC-10	200	500	1307	TO	TO	0.00	122	1	3	0.89	0.48	0.002999	122	1	3	0.75	0.32
BN	or-100-5-1-UC-10	200	500	1312	26.24	13.10	0.00	133	1	4	0.93	0.48	0.002999	133	1	4	0.82	0.42
BN	or-100-20-9-UC-10	200	500	1310	TO	TO	0.00	116	5	17	0.64	0.46	0.002999	116	5	17	0.89	0.98
BN	or-100-20-10-UC-10	200	500	1309	TO	TO	0.00	116	5	19	0.70	0.46	0.003999	116	5	19	0.99	0.06
BN	or-100-5-10-UC-10	200	500	1308	654.19	167.25	0.00	0	0	0	0.12	0.49	0.002999	128	0	0	0.50	0.21
BN	or-100-5-2-UC-10	200	500	1308	631.79	TO	0.00	122	2	7	0.19	0.52	0.002999	122	2	7	0.57	1.02
BN	or-100-5-7-UC-10	200	500	1309	194.50	143.49	0.00	0	0	0	0.09	0.44	0.007999	129	0	0	0.92	0.62
BN	or-100-10-2-UC-10	200	500	1308	TO	TO	0.00	117	3	12	0.08	0.44	0.003999	117	3	12	0.92	0.68

Benchmark Information					Σ		pmc(Σ)						B+E(Σ, ∞)					
Family	Name	#var	#cl	#lit	Cachet	SharpSAT	time pmc	#elim	#cl	#lit	Cachet	SharpSAT	time B + E	#elim	#cl	#lit	Cachet	SharpSAT
BN	or-100-5-9-UC-10	200	500	1314	198.55	134.30	0.00	132	4	12	0.15	0.50	0.002999	132	4	12	0.98	0.91
BN	or-100-5-8-UC-10	200	500	1306	1549.90	TO	0.00	118	1	2	0.77	0.52	0.009999	118	1	2	0.22	0.95
BN	or-100-20-1-UC-10	200	500	1311	TO	TO	0.00	112	8	31	0.25	0.45	0.003999	112	8	31	0.22	1.01
BN	or-70-20-2-UC-10	140	350	918	7.03	4.74	0.00	85	4	15	0.30	0.44	0.001999	85	4	15	0.28	0.06
BN	or-70-20-1-UC-10	140	350	922	4.08	2.52	0.00	89	7	23	0.20	0.58	0.004000	89	7	23	0.51	0.93
BN	or-70-10-4-UC-10	140	350	916	36.06	18.22	0.00	77	4	12	0.27	0.59	0.001999	77	4	12	0.52	0.53
BN	or-70-20-7-UC-10	140	350	916	13.54	7.38	0.00	82	3	8	0.56	0.47	0.000999	82	3	8	0.58	0.59
BN	or-70-10-3-UC-10	140	350	921	0.86	0.95	0.00	90	5	16	0.60	0.46	0.004000	90	5	16	0.82	0.91
BN	or-70-5-8-UC-10	140	350	919	1.92	1.84	0.00	92	2	7	0.64	0.51	0.000999	92	2	7	0.82	0.98
BN	or-70-5-6-UC-10	140	350	914	84.32	55.63	0.00	82	1	4	0.70	0.44	0.001999	82	1	4	0.89	0.08
BN	or-70-5-10-UC-10	140	350	919	2.27	1.29	0.00	90	3	11	0.61	0.43	0.005000	90	3	11	0.12	0.17
BN	or-70-10-5-UC-10	140	350	914	12.12	9.94	0.00	82	1	4	0.66	0.48	0.001999	82	1	4	0.13	0.91
BN	or-70-20-4-UC-10	140	350	916	81.63	38.93	0.00	78	4	15	0.61	0.66	0.001999	78	4	15	0.19	0.60
BN	or-70-10-9-UC-10	140	350	919	0.98	0.68	0.00	94	2	6	0.65	0.68	0.004000	94	2	6	0.40	0.66
BN	or-70-20-6-UC-10	140	350	917	17.07	11.46	0.00	81	4	15	0.61	0.78	0.001999	81	4	15	0.40	0.89
BN	or-70-20-8-UC-10	140	350	915	77.60	42.96	0.00	77	3	10	0.67	0.48	0.001999	77	3	10	0.47	0.94
BN	or-70-5-1-UC-10	140	350	916	1.47	0.97	0.00	88	1	3	0.60	0.48	0.005000	88	1	3	0.70	0.01
BN	or-70-10-10-UC-10	140	350	915	8.37	5.91	0.00	85	1	3	0.66	0.52	0.001999	85	1	3	0.70	0.08
BN	or-70-10-6-UC-10	140	350	915	7.95	3.75	0.00	84	1	3	0.58	0.48	0.001999	84	1	3	0.77	0.92
BN	or-70-5-7-UC-10	140	350	916	4.90	3.06	0.00	85	2	7	0.63	0.49	0.005000	85	2	7	1.00	0.16
BN	or-70-5-2-UC-10	140	350	916	2.96	1.39	0.00	87	1	3	0.61	0.62	0.001999	87	1	3	1.01	0.20
BN	or-70-20-10-UC-10	140	350	917	15.56	11.35	0.00	83	3	10	0.67	0.58	0.000999	83	3	10	0.07	0.92
BN	or-70-5-3-UC-10	140	350	924	0.66	0.42	0.00	0	0	0	0.59	0.60	0.002999	110	0	0	0.49	1.02
BN	or-70-10-1-UC-10	140	350	918	0.75	0.59	0.00	88	2	7	0.64	0.69	0.000999	88	2	7	0.50	1.01
BN	or-70-5-9-UC-10	140	350	920	0.36	0.48	0.00	98	2	5	0.60	0.80	0.000999	98	2	5	0.56	0.05
BN	or-70-5-5-UC-10	140	350	917	1.30	0.73	0.00	0	0	0	0.64	0.46	0.005000	92	0	0	0.57	1.05
BN	or-70-10-7-UC-10	140	350	915	21.27	15.83	0.00	85	1	3	0.60	0.47	0.005999	85	1	3	0.64	0.05
BN	or-70-10-8-UC-10	140	350	917	1.45	0.90	0.00	0	0	0	0.63	0.51	0.000999	92	0	0	0.64	0.11
BN	or-70-5-4-UC-10	140	350	916	5.87	6.03	0.00	83	2	6	0.61	0.60	0.001999	83	2	6	0.74	0.23
BN	or-70-20-3-UC-10	140	350	916	572.94	104.74	0.00	74	5	17	0.67	0.45	0.006999	74	5	17	0.80	0.03
BN	or-70-20-5-UC-10	140	350	917	101.56	44.74	0.00	78	4	13	0.56	0.45	0.005999	78	4	13	0.97	0.62
BN	or-70-10-2-UC-10	140	350	915	26.94	20.33	0.00	78	3	10	0.60	0.50	0.001999	78	3	10	0.97	0.68
BN	or-70-20-9-UC-10	140	350	921	0.44	0.61	0.00	94	2	5	0.59	0.59	0.000999	94	2	5	0.03	0.99