

## Monolithic Results

Instance Name	A*(GNN)			BFS		
	Length.	Nodes	Time[ms]	Length.	Nodes	Time[ms]
Assemble_B10-pl.5	–	–	TO	–	–	TO
Assemble_B2-pl.5	5	14	264	5	14	125
Assemble_B3-pl.5	5	14	154	5	14	249
Assemble_B4-pl.5	5	14	332	5	14	167
Assemble_B5-pl.5	5	14	371	5	14	245
Assemble_B6-pl.5	5	14	826	5	14	689
Assemble_B7-pl.5	5	14	4790	5	14	4660
Assemble_B8-pl.5	5	14	25636	5	14	25949
Assemble_B9-pl.5	5	14	296625	5	14	379798
Assemble_C-pl.5	5	14	237	5	14	165
CC.2.2.3-pl.3	4	11	108	22	146	2225
CC.2.2.3-pl.4	5	9	141	7	12	123
CC.2.2.3-pl.5	5	9	134	10	24	563
CC.2.2.3-pl.6	6	10	106	9	18	246
CC.2.2.3-pl.7	8	33837	214811	–	–	TO
CC.2.2.3-pl.8	8	247	2434	11	36	763
CC.2.2.4-pl.3	3	3	279	3	3	290
CC.2.2.4-pl.4	6	9	212	8	11	689
CC.2.2.4-pl.5	9	77	2507	13	38	1221
CC.2.2.4-pl.6	7	26	296	–	–	TO
CC.2.2.4-pl.7	8	498	4701	–	–	TO
CC.2.3.4-pl.3	3	3	1381	3	3	918
CC.2.3.4-pl.4	6	10	1655	13	19	4652
CC.2.3.4-pl.5	12	61	5848	13	24	5774
CC.2.3.4-pl.6	8	11	3383	8	10	5843
CC.2.3.4-pl.7	9	22	3244	9	19	4247
CC.3.2.3-pl.3	3	3	196	3	3	330
CC.3.2.3-pl.4	5	7	160	6	8	315
CC.3.2.3-pl.5	6	45	463	–	–	TO
CC.3.2.3-pl.6	6	113	1092	–	–	TO
CC.3.2.3-pl.7	7	1835	24464	–	–	TO
CC.3.3.3-pl.3	3	4	367	3	3	295
CC.3.3.3-pl.4	4	4	495	4	4	424

CC_3.3.3-pl.5	7	22	534	8	11	670
CC_3.3.3-pl.6	—	—	TO	—	—	TO
CC_3.3.3-pl.7	8	79	1255	—	—	TO
Coin.in.the.Box-pl.2	2	2	50	2	2	64
Coin.in.the.Box-pl.3	3	17	129	4	12	142
Coin.in.the.Box-pl.5	5	77	552	5	16	220
Coin.in.the.Box-pl.6	6	381	2748	—	—	TO
Coin.in.the.Box-pl.7	7	1817	13110	—	—	TO
SC_4.1-pl.3	3	4	52	3	4	125
SC_4.1-pl.5	5	17	99	—	—	TO
SC_4.2-pl.5	5	15	99	—	—	TO
SC_4.2-pl.7	7	120	545	—	—	TO
SC_4.2-pl.8	8	339	1316	—	—	TO
SC_4.3-pl.5	5	17	62	—	—	TO
SC_4.3-pl.6	6	21	113	—	—	TO
SC_4.3-pl.8	8	59	156	—	—	TO
SC_4.4-pl.5	5	17	87	—	—	TO
SC_8.10-pl.6	6	49	343	483	4776	58158
SC_8.10-pl.8	8	542	3841	1586	19087	326379
SC_8.10-pl.9	9	1660	14557	1586	19087	319399
SC_8.10-pl.12	12	31662	203157	—	—	TO
SC_9.11-pl.4	4	8	141	6	13	172
SC_9.11-pl.5	5	11	96	8	21	296
SC_9.11-pl.6	6	26	161	509	5116	55844
SC_9.11-pl.7	7	41	299	1286	15107	195915
SC_9.11-pl.8	8	66	271	1098	12438	186999
SC_9.11-pl.9	9	238	2158	1099	12457	150920
SC_9.11-pl.10	10	663	5467	1100	12470	176047
SC_9.11-pl.11	11	1262	10960	1100	12472	173729
SC_10.8-pl.9	—	—	TO	—	—	TO
SC_10.8-pl.10	10	10	97	10	10	112
SC_10.8-pl.14	14	93	378	16	33	273
SC_10.8-pl.15	15	130	543	—	—	TO
SC_10.10-pl.2	2	6	173	4	13	720
SC_10.10-pl.3	3	10	248	—	—	TO
SC_10.10-pl.6	6	309	5998	—	—	TO
SC_10.10-pl.7	7	647	11495	—	—	TO

SC_10_10-pl_9	9	10	120	9	10	225
SC_10_10-pl_9	9	886	17444	13	65	946
SC_10_10-pl_10	10	15	158	11	17	273
SC_10_10-pl_10	10	3096	58382	–	–	TO
SC_10_10-pl_13	13	15826	330014	–	–	TO
SC_10_10-pl_13	13	51	360	17	49	519
SC_10_10-pl_14	14	30967	582175	–	–	TO
SC_10_10-pl_17	17	946	5175	–	–	TO
SC_10_10-pl_17	–	–	TO	–	–	TO
avg± std (all)	7 ± 3	1723 ± 6489	24971 ± 88115	207 ± 450	2322 ± 5273	42635 ± 93496
iqr± iqr (all)	6 ± 4	44 ± 232	971 ± 4112	8 ± 8	18 ± 27	1290 ± 5528
avg± std (comm)	6 ± 3	130 ± 326	8372 ± 41892	207 ± 450	2322 ± 5273	42635 ± 93496
iqr± iqr (comm)	6 ± 4	17 ± 42	584 ± 2276	8 ± 8	18 ± 27	1290 ± 5528
Solved Instances	75/79 (94.94%)			49/79 (62.03%)		

Table 1: Comparison of execution on the domain over the **Train** and **Test** instances.