

DIMACS COLORING BENCHMARKS				
File	Code	Nodes	Edges	Colors Needed
mulsol.i.1.col	(Reg)	197	3925	
mulsol.i.2.col	(Reg)	188	3885	
mulsol.i.3.col	(Reg)	184	3916	
mulsol.i.4.col	(Reg)	185	3946	
mulsol.i.5.col	(Reg)	186	3973	
zeros.i.1.col	(Reg)	211	4100	
zeros.i.2.col	(Reg)	211	3541	
zeros.i.3.col	(Reg)	206	3540	
fpsol2.i.1.col	(Reg)	496	11654	
fpsol2.i.2.col	(Reg)	451	8691	
fpsol2.i.3.col	(Reg)	425	8688	
inithx.i.1.col	(Reg)	864	18707	
inithx.i.2.col	(Reg)	645	13979	
inithx.i.3.col	(Reg)	621	13969	
le450_15a.col	(Lei)	450	8168	15
le450_15b.col	(Lei)	450	8169	15
le450_15c.col	(Lei)	450	16680	15
le450_15d.col	(Lei)	450	16750	15
le450_25a.col	(Lei)	450	8260	25
le450_25b.col	(Lei)	450	8263	25
le450_25c.col	(Lei)	450	17343	25
le450_25d.col	(Lei)	450	17425	25
le450_5a.col	(Lei)	450	5714	5
le450_5b.col	(Lei)	450	5734	5
le450_5c.col	(Lei)	450	9803	5
le450_5d.col	(Lei)	450	9757	5
flat1000_50_0.col.b	(Cul)	1000	245000	50
flat1000_60_0.col.b	(Cul)	1000	245830	60
flat1000_76_0.col.b	(Cul)	1000	246708	76
flat300_20_0.col.b	(Cul)	300	21375	20
flat300_26_0.col.b	(Cul)	300	21633	26
<i>Continued on next page</i>				

DIMACS COLORING BENCHMARKS (cont.)				
File	Code	Nodes	Edges	Colors Needed
flat300_28_0.col.b	(Cul)	300	21695	28
school1.col	(Sch)	385	19095	
school1_nsh.col	(Sch)	352	14612	
latin_square_10.col	(Lat)	900	307350	
DSJC1000.1.col.b	(DSJ)	1000	99258	
DSJC1000.5.col.b	(DSJ)	1000	499652	
DSJC1000.9.col.b	(DSJ)	1000	898898	
DSJC125.1.col.b	(DSJ)	1000	1472	
DSJC125.5.col.b	(DSJ)	1000	7782	
DSJC125.9.col.b	(DSJ)	1000	13922	
DSJC250.1.col.b	(DSJ)	1000	6436	
DSJC250.5.col.b	(DSJ)	1000	31336	
DSJC250.9.col.b	(DSJ)	1000	55794	
DSJC500.1.col.b	(DSJ)	1000	24916	
DSJC500.5.col.b	(DSJ)	1000	125248	
DSJC500.9.col.b	(DSJ)	1000	224874	
DSJR500.1.col.b	(DSJ)	1000	7110	
DSJR500.1c.col.b	(DSJ)	1000	242550	
DSJR500.5.col.b	(DSJ)	1000	117724	

Notes:

**Reg** (From Gary Lewandowski [gary@cs.wisc.edu](mailto:gary@cs.wisc.edu)) Problem based on register allocation for variables in real codes. For more instances, see the programs and data in [graph/contributed/lewandowski](#).

**Lei** (From Craig Morgenstern [morgenst@riogrande.cs.tcu.edu](mailto:morgenst@riogrande.cs.tcu.edu)) Leighton graphs with guaranteed coloring size. A reference is F.T. Leighton, *Journal of Research of the National Bureau of Standards*, **84**: 489–505 (1979). For many more instances and programs, see the work in [graph/contributed/morgenstern](#).

**Cul** (From Joe Culberson [joe@cs.ualberta.ca](mailto:joe@cs.ualberta.ca)) Quasi-random coloring problem. For generator, and further information, see program and README.gen in [graph/contributed/culberson](#).

**Sch** (From Gary Lewandowski [lewandow@cs.wisc.edu](mailto:lewandow@cs.wisc.edu)) Class scheduling graphs, with and without study halls.

**Lat** (From Gary Lewandowski `lewandow@cs.wisc.edu`) Latin square problem.

**DSJ** (From David Johnson `dsj@research.att.com`) Random graphs used in his paper with Aragon, McGeoch, and Schevon, “Optimization by Simulated Annealing: An Experimental Evaluation; Part II, Graph Coloring and Number Partitioning”, *Operations Research*, 31, 378–406 (1991). DSJC are standard  $(n,p)$  random graphs. DSJR are geometric graphs, with DSJR..*c* being complements of geometric graphs.