

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		
zeroin.i.1.col	(Reg)	211	4100		
zeroin.i.2.col	(Reg)	211	3541		
zeroin.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	

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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) 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) 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) Quasi-random coloring problem. For generator, and further information, see program and README.gen in graph/contributed/culberson.

Sch (From Gary Lewandowski lewadow@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 Annelaing: 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.