

Vertex Cover Algorithm - Benchmark Results

R = Approximation Ratio ($\tau(G)$ / Optimal MVC)

Benchmarks	V	Optimal MVC	$\tau(G)$	R	$\alpha(G)$	$\omega(G)$	t
jhonson8_2_4	28	24	24	1.000	4	7	0.1646s
graph50_6	50	38	38	1.000	12	10	0.1090s
graph50_10	50	35	35	1.000	15	7	0.0865s
Hamming6_2	64	32					
Hamming6_4	64	60	248	4.133	8	16	1.9563s
jhonson8_4_4	70	56	62	1.107	8	5	0.0578s
graph100_1	100	60	60	1.000	40	18	0.2713s
graph100_10	100	70	70	1.000	30	33	0.0308s
jhonson16_2_4	120	112	112	1.000	8	15	0.1670s
c125	125	91	93	1.022	32	3	0.1134s
keller4	171	160	164	1.025	7	8	0.7533s
graph200_5	200	150	150	1.000	50	8	0.9103s
broc200_2	200	188	193	1.027	7	8	0.9553s
broc200_4	200	183	195	1.066	5	12	1.1448s
cfat200_1	200	188	188	1.000	12	18	0.3661s
cfat200_2	200	176	176	1.000	24	9	1.4713s
cfat200_5	200	142	142	1.000	58	3	1.0329s
gen200_p0.9_44	200	156					
sanr200-0.7	200	182	184	1.011	16	6	0.3047s
C250	250	206	211	1.024	39	5	0.7996s
Hamming8_2	256	128					
Hamming8_4	256	240	248	1.033	8	16	1.8955s
phat300_1_c	300	292	265	0.908	35	7	1.7772s
phat300_2_c	300	275	276	1.004	24	22	2.2236s
mann_a27	378	252	375	1.488	3	117	6.1505s
sanr400_0.5	400	387	392	1.013	8	9	5.3227s
sanr400_0.7	400	379	384	1.013	16	6	4.2905s
jhonson32_2_4_c	479	480	480	1.000	16	31	4.9912s
graph500_1	500	350	350	1.000	150	10	7.9447s
graph500_2	500	400	400	1.000	100	28	8.2670s
graph500_5	500	290	290	1.000	210	43	7.9601s
cfat500_1	500	486	486	1.000	14	39	8.5693s