Max

	symmetric	asymmetric
without triangle inequality	61/81 – o(1) Improved deterministic approximation algorithms for Max TSP, Chen, et al., '05 3/4 An algorithm with an estimate for the traveling salesman problem of maximum (German), Serdyukov, '84	2/3 Approximation Algorithms for Asymmetric TSP by Decomposing Directed Regular Multigraphs, Kaplan, et al., '05 5/8 A 5/8 approximation algorithm for the maximum asymmetric TSP, Lewenstein, et al., '03 8/13 An 8/13 approximation algorithm for the asymmetric maximum TSP, Blaser, '04 38/63 Long tours and short super-strings, Kosaraju, et al., '94 1/2 An analysis of approximations for finding a maximum weight Hamiltonian circuit, Fisher, et al., '79
	251/331 – o(1), randomized An improved randomized approximation algorithm for Max TSP, Chen, et al. '05 25/33 – o(1), randomized Better approximation for Max TSP, Hassin & Rubinstein, '00	
with triangle inequality	7/8 – o(1) Improved Approximation Algorithms for Metric Max TSP, Chen & Nagoya, '05 17/20 – o(1) Improved deterministic approximation algorithms for Max TSP, Chen, et al., '05 5/6 Polynomial algorithms with estimates 3/4 and 5/6 for the traveling salesman problem of maximum (German), Kostochka, et al., '85	31/40 Improved Approximation Algorithms for Metric Maximum ATSP and Maximum 3-Cycle Cover Problems, Blaser, Shankar Ram, et al., '05 27/35 Improved Approximation Algorithms for Metric Max TSP, Chen & Nagoya, '05 10/13 Approximation Algorithms for Asymmetric TSP by Decomposing Directed Regular Multigraphs, Kaplan, et al., '05 3/4 Polynomial algorithms with estimates 3/4 and 5/6 for the traveling salesman problem of maximum (German), Kostochka, et al., '85
	7/8 – o(1), randomized A 7/8-approximation approximations for metric max TSP, Hassin & Rubinstein, '02	
weights {0, 1}		3/4 A 3/4-Approximation Algorithm for Maximum ATSP with Weights Zero and One, Blaser, '04 2/3 Approximating maximum weight cycle covers in directed graphs with edge weights zero and one, Blaser, et al., '03 7/12 An approximation algorithm for the asymmetric traveling salesman problem with distances one and two, Vishwanathan, '92
weights [a, ta]	(t+1)/(2t) Approximation results toward nearest neighbour heuristic, Monnot, '01	
sharpend triangle inequality	a + (1-a)((1-\beta)/\beta)^2, where 'a' is factor for TSP with triangle inequality Approximation algorithms for the traveling salesman problem, Monnot, et. al., '02	
relaxed triangle inequality		
euclidean		
planar		