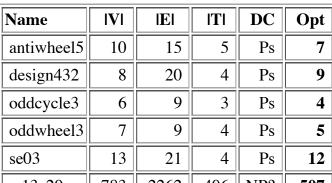
Testset SP 10/19/25, 12:23 PM

Testset SP

Artificially constructed Steiner tree problems.

The files can be found in the <u>download</u> section.

Name	IVI	IEI	ITI	DC	Opt
antiwheel5	10	15	5	Ps	7
design432	8	20	4	Ps	9
oddcycle3	6	9	3	Ps	4
oddwheel3	7	9	4	Ps	5
se03	13	21	4	Ps	12
w13c29	783	2262	406	NP?	507
w23c23	1081	3174	552	NP?	689
w3c571	3997	10278	2284	NP?	2854



The column **DC** classifies the difficulty of the instance.

L Solvable by usage of local preprocessing. Typical examples are the SD-Test, BD-n Tests and FST computations. Neither a global upper nor lower bound needs to be computed.

Solvable by polynomial time algorithms, like dual ascent in combination with primal heuristic, a integral LP formulation or advanced preprocessing like reduced cost criteria or the RCR-Test.

No polynomial time algorithm is known. Use of an exponential time enumeration sceme like Branchand-Bound is neccessary.

The letter after class gives an impression how long it takes to solve the problem using state-of-the-art softand hardware. secounds means less than a minute (this includes instances which can be solved in fractions of a second). minutes means less than an hour. hours is less than a day and days is less than a week. weeks mean it takes really a long time to solve this instance. ? means the instance is not solved or the time is not known.

If the number in the **Opt** column is written in *italics* the optimum is not known. The number given is the best know upper bound.

Last Update: 2015/02/11 11:57:20 \$ by Thorsten Koch

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P

NP