

Approximation Algorithms

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1. The k -Center problem.
 - (a) Problem definition.
 - (b) A greedy 2-approximation algorithm.
 - (c) Parametric Pruning.
 - (d) Dominating set of a graph.
 - (e) Square of a graph.
 - (f) The graph-square based algorithm and its analysis.
 - (g) Tightness analysis.
 - (h) Inapproximability.
 - (i) The weighted variant.
 - (j) Weighted dominating set.