Reductions



1/3 points earned (33%)

You haven't passed yet. You need at least 80% to pass. Review the material and try again! You have 3 attempts every 8 hours.

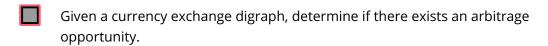
Review Related Lesson



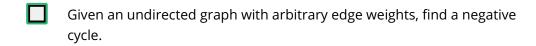
0/1 points

1. (seed = 594452)

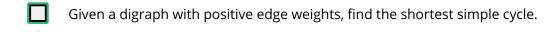
Which of the following problems can be linear-time reduced *to* the standard shortest-paths problem in digraphs with nonnegative weights? Check all that apply.



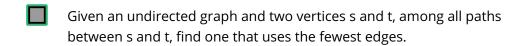
This should not be selected



Un-selected is correct



Un-selected is correct



Correct Given a digraph and two vertices s and t, find a path from s to t that uses the fewest edges. Correct 0/1 points 2. (seed = 558758)Which problems are known to have the same asymptotic complexity as sorting an array of N real numbers? Assume the quadratic decision tree model of computation. Check all that apply. Given an array of N real numbers, determine if any two sum to zero. This should be selected Given two arrays of N real numbers, is one a permutation of the other (i.e., they contain exactly the same multiset of numbers)? Correct Given an array of N real numbers, determine if any three sum to zero. Un-selected is correct Given an array of N real numbers, determine if any three are equal. Correct Given N points in the plane, compute a minimum spanning tree, where the weight between two points is its Euclidean distance.

