AUC Cairo Spring Term 2024 Handin: Gradescope

Graph Theory Bonus Homework Series 06 In Groups of 2-4 Students

Keywords: Eulerian Graphs.

Exercise 1. Prove Corollary 4.6 from the lecture, i.e. show that a connected graph contains an Euclidian trail if and only if either every vertex has even degree or there are exactly two vertices of odd degree.

4 points.

Exercise 2. Assume that every edge of some graph G lies on an odd number of cycles. Prove that G is Eulerian.

4 points.