

# Homework 5: Bipartite graphs and geometry

Konstantin Miagkov

May 6, 2018

**Problem 1.**

Show that if in a bipartite graph the degrees of all vertices are the same, the number of white vertices equals the number of black vertices.

**Problem 2.**

Show that a bipartite graph has no odd cycles.

**Problem 3.**

Kiselev 275, p. 102.