

Spring 2022, Math 579: Preliminary Problem Set 12
Due: Thursday, April 21st, 2022
Matching and Bipartite Graphs

Preliminary problems. These problems should be completed before discussion on Thursday.

(P1) Consider the cycle graph C_4 with the vertices are labeled 1, 2, 3, 4 clockwise. Find the number of ways to properly color C_4 using the colors red, green, and blue.

(P2) Find a 2-coloring of the graph depicted below. Redraw the graph with vertices of one color on the left and the remaining vertices on the right (how we usually draw bipartite graphs).

