HOMEWORK 6 (MATH 180, SPRING 2016)

Read: **MN**, sections 8.1, 8.2, 8.4, 8.5 (second proof)

Solve: Exc 3 in §8.1.

I. Use the Matrix Tree Theorem 8.5.1 to find the number of spanning trees in C_n.

II. Use the Matrix Tree Theorem 8.5.1 to find the number of spanning trees in $K_{4,4}$.

III. Use Prüfer code to count the number of spanning trees in K_n with $\deg(1) = 2$.

IV. Use Prüfer code to count the number of spanning trees in K_n with degree of each vertex either 1 or 3.

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This Homework is due Wednesday May 25, at 12:59:59 pm. (right before class). Please read the collaboration policy on the course web page. Make sure you write your name in the beginning and your collaborators' names at the end. You MUST box all answers. Remember that answers are not enough, you also need to provide an explanation exhibiting your logic.