

HOMEWORK 6 (MATH 180, WINTER 2021)

Read: MN (Second ed.), sections 8.1, 8.4

Solve: Exercises in MN:

1, 3 in §8.1

1 in §8.4

Additional exercises:

- I. Use Cayley formula to compute the number of spanning trees in $K_n - e$, for any edge e .
- II. Compute the number of spanning trees in K_{20} such that vertices $\{1, \dots, 7\}$ are all leaves (other vertices may also be leaves).

This Homework is due Wednesday Feb 24, at 8:59 am (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. Box all answers. Remember that answers are not enough, you also need to provide an explanation exhibiting your logic. The explanation can be brief, but must indicate all logical steps.

P.S. Each item above has the same weight.