

Homework 5

0. Problems from sections 8 and 9:

8.5.3, 8.5.5, 8.5.6, 9.2.3, 9.2.8.

1. Prove that if G is connected and $|E| = |V| - 1$ then G is a tree. Also, prove that if G is cycle-free and $|E| = |V| - 1$ then G is a tree.