Graph Theory 2, MATH 5450, Spring 2023

Homework 3, 5.2. Separations and Blocks,

9.1. Vertex Connectivity

Due Saturday, February 4, at 11:59 pm

Write in complete sentences!!! *Explain* what you are doing and convince me that you understand what you are doing and why. Justify all steps by quoting relevant results from the textbook, class notes, or hypotheses. Do not copy the work of others; **do your own work!!!**

5.2.5. (a) Prove that a graph is even if and only if each of its blocks is even.

9.1.3. (a) Prove that if G is simple and $\delta \geq n - 2$, then $\kappa = \delta$.