

HW8

December 4, 2024

Name: _____

- a) For any pair of natural numbers k and ℓ , where $\ell \leq k$, find a graph G such that $k_e(G) = k$ and $k_v(G) = \ell$. [**7.5 points**]
- b) Prove that every vertex 2-connected graph on n vertices has at least n spanning trees. When does equality occur? [**7.5 points**]