

HW Assignment 5 (Due date: April 7, 9am)

1. [MST, 10 points] Exercise 23.1-1, page 629.
2. [MST, 10 points] Exercise 23.1-3, page 629.
3. [MST, 10 points] Exercise 23.1-5, page 629.
4. [MST, 10 points] Exercise 23.1-6, page 630.
5. [Kruskal's MST, 10 points] Exercise 23.2-4, page 637.
6. [MST, 10 points] Exercise 23.2-8, page 637.
7. (*) [MST, 10 points] Let $G = (V, E)$ be a weighted, undirected, connected graph such that all the edge weights are distinct. Is the minimum spanning tree unique? If yes, provide a proof. If not, provide a counterexample.