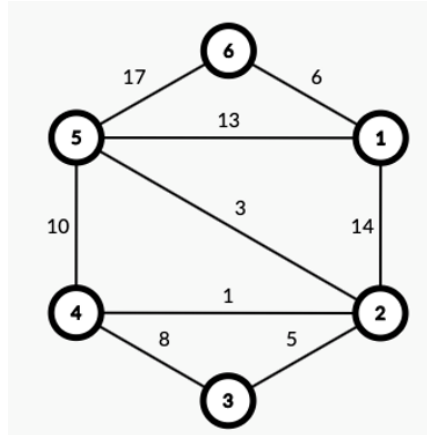


Chapter 23 Homework
Deadline: 2021/12/15 10:10 a.m.

1. Given the following undirected weighted graph:



- (a) Find its minimum spanning tree using Kruskal's algorithm. Show every step of the process by adding edges into the spanning tree one at a time.
- (b) Find its minimum spanning tree using Prim's algorithm. The source is vertex 1. Show every step of the process by adding edges into the spanning tree one at a time.
2. Show that if an edge (u, v) is contained in some minimum spanning tree, then it is a light edge crossing some cut of the graph.