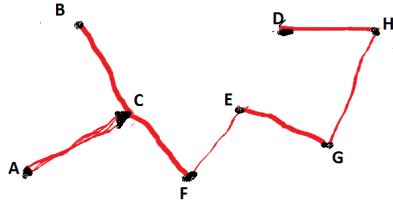


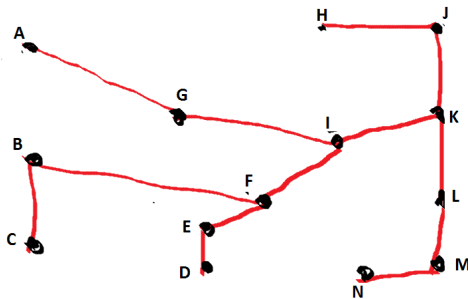
## Section 7.5 Homework

Exercise 1 through 6, use Prim's algorithm as given in this section to find a minimal spanning tree for the connected graph indicated. Use the specified vertex as the initial vertex.

1. Let  $G$  be the graph shown in Figure 7.50. Begin at  $F$

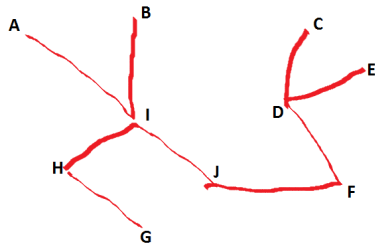


5. Let  $G$  be the graph shown in Figure 7.60. Begin at  $K$ .



In Exercises 10 through 12, use Kruskal's algorithm to find a minimal spanning tree from the indicated graph.

10. Let  $G$  be the graph shown in Figure 7.51.



13. The distances between eight cities are given in the following table. Use Kruskal's algorithm to find a minimal spanning tree whose vertices are these cities. What is the total distance for the tree?

