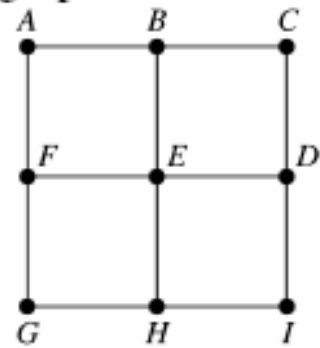
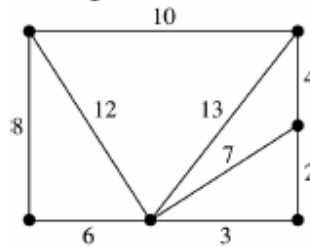


Trees

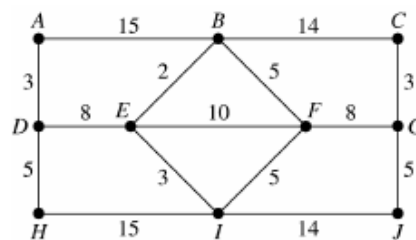
10. Determine a spanning tree for the graph shown below.



11. Determine the minimum-cost spanning tree for the following weighted graph.

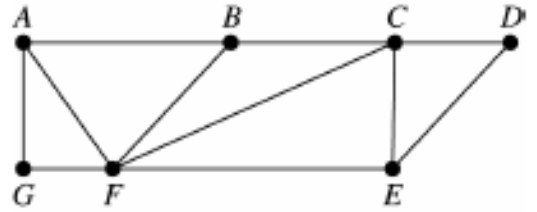


12. Ron Willing is planning to install a new sprinkler system in his yard. His current system has sprinkler heads already in place as shown in the figure below. The numbers are shown in feet.

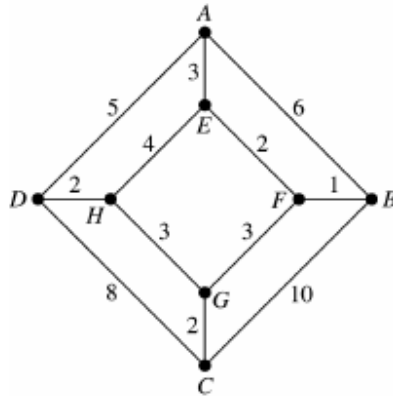


- Determine the minimum-cost spanning tree that reaches each valve.
- If the new sprinklers system materials cost \$1.50 per foot, what is the cost of installing the system determined in part (a)?

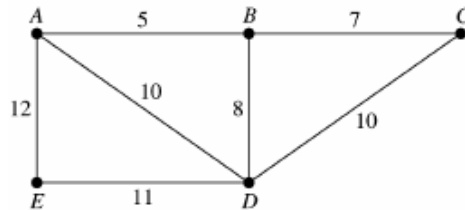
10. Determine a spanning tree for the graph shown below.



11. Determine the minimum-cost spanning tree for the following weighted graph.

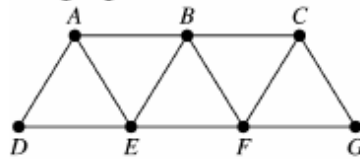


12. Jaclyn is setting up a new computer network for her office. Her current system has computers already in place as shown in the figure below. The numbers are shown in feet.

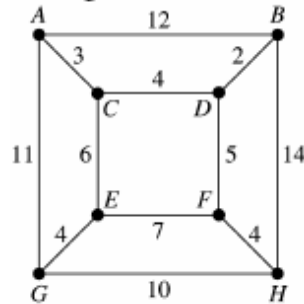


- Determine the minimum-cost spanning tree that reaches each computer.
- If the new computer network materials cost \$1.60 per foot, what is the cost of installing the system determined in part (a)?

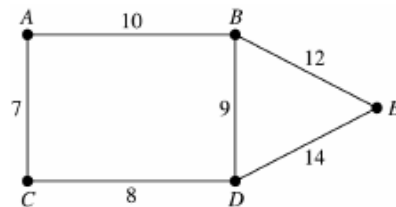
10. Determine a spanning tree for the graph shown below.



11. Determine the minimum-cost spanning tree for the following weighted graph.



12. Kathleen is planning on installing a new computer network at her small business. Her current system has computers already in place as shown in the figure below. The numbers are shown in feet.



- Determine the minimum-cost spanning tree that reaches each computer.
- If the new networking system materials cost \$2.20 per foot, what is the cost of installing the system determined in part (a)?