

Rosen, Discrete Mathematics and Its Applications, 6th edition
 Extra Examples

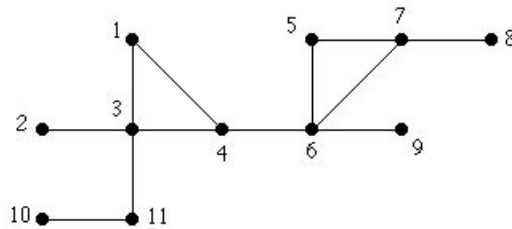
Section 10.4—Spanning Trees



— Page references correspond to locations of Extra Examples icons in the textbook.

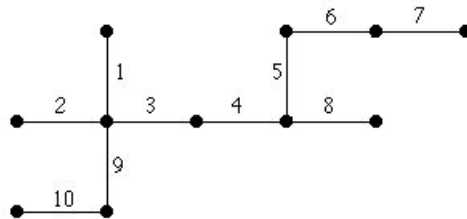
p.727, icon at Example 3

#1. Use a depth-first search to find a spanning tree for the following graph. Use vertex 1 as the root and use numerical ordering to determine in which order to visit the vertices.



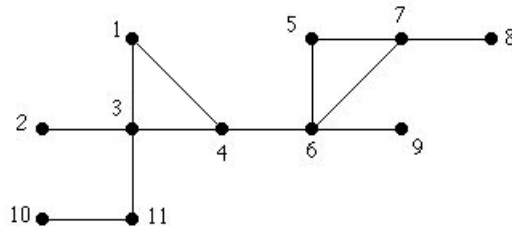
Solution:

The following tree shows the result of the depth-first search. The numbers along the edges indicate the order in which the edges were chosen.



p.729, icon at Example 5

#1. Use a breadth-first search to find a spanning tree for the following graph. Use vertex 1 as the root and use numerical ordering to determine in which order to visit the vertices.



Solution:

The following tree shows the result of the breadth-first search. The numbers along the edges indicate the order in which the edges were chosen.

