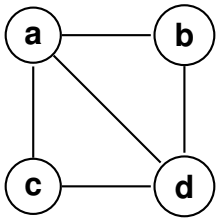
10.3 Representing Graphs and Graph Isomorphism

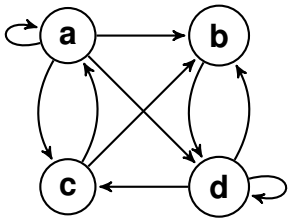
10.3 pg. 675 # 1 & # 5

Use an adjacency list and adjacency matrix to represent the given graph.



10.3 pg. 675 # 3 & # 7

Use an adjacency list and adjacency matrix to represent the given graph.



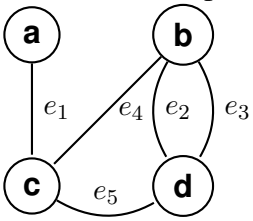
10.3 pg. 675 # 17

Draw an undirected graph represented by the given adjacency matrix.

$$\begin{bmatrix} 1 & 2 & 0 & 1 \\ 2 & 0 & 3 & 0 \\ 0 & 3 & 1 & 1 \\ 1 & 0 & 1 & 0 \end{bmatrix}$$

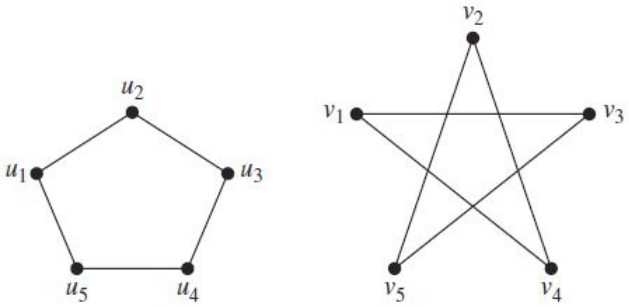
10.3 pg. 676 # 27

Use an incidence matrix to represent the graph.



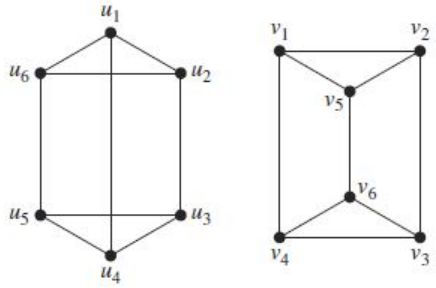
10.3 pg. 667 # 35

Determine whether the pair of graphs is isomorphic. Exhibit an isomorphism or provide a rigorous argument that none exists.



10.3 pg. 667 # 39

Determine whether the pair of graphs is isomorphic. Exhibit an isomorphism or provide a rigorous argument that none exists.



10.3 pg. 667 # 41

Determine whether the pair of graphs is isomorphic. Exhibit an isomorphism or provide a rigorous argument that none exists.