### 10.2 Graph Terminology and Special Types of Graphs

## 10.2 pg. 665 \# 1

Find the number of vertices, the number of edges, and the degree of each vertex in the given undirected graph. Identify all isolated and pendant vertices.


## 10.2 pg. 665 \# 13

What does the degree of a vertex represent in an academic collaboration graph? What does the neighborhood of a vertex represent? What do isolated and pendant vertices represent?

## 10.2 pg. 665 \# 21

Determine whether the graph is bipartite.


## 10.2 pg. 666 \# 25

Determine whether the graph is bipartite.


## 10.2 pg. 666 \# 33

For the following graph $G$ find

a) a subgraph induced by the vertices $a, b, c$, and $f$.
b) the new graph $G_{1}$ obtained from $G$ by contracting the edge connecting $b$ and $f$

## 10.2 pg. 667 \# 57

Find the union of the given pair of simple graphs.


