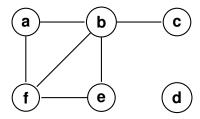
# 10.2 Graph Terminology and Special Types of Graphs

#### 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.

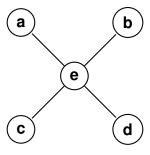


### 10.2 pg. 665 # 13

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?

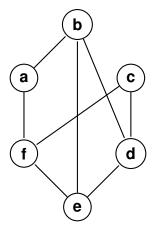
#### 10.2 pg. 665 # 21

Determine whether the graph is bipartite.



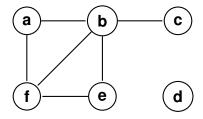
## 10.2 pg. 666 # 25

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  ${\cal G}_1$  obtained from  ${\cal G}$  by contracting the edge connecting b and f

# 10.2 pg. 667 # 57

Find the union of the given pair of simple graphs.

