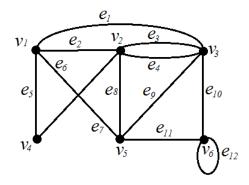
## Math 270 - Basic Discrete Mathematics Practice Quiz on Section 1.4

**Directions:** Answer the problems given below.

1. Use the graph G given below to answer parts a.-d..



- **a.** How many edges does G have?
- **b.** List all parallel edges of G, if any exist:  $Q_3$  and  $Q_4$
- c. Identify all loops of G, if any exist:  $\underline{\hspace{.1in} } \underline{\hspace{.1in}} \underline{\hspace{.1i$
- ${\bf d.}$  Find the degrees of all of the vertices:

$$\deg(v_4) = 2$$
 $\deg(v_5) = 4$ 
 $\deg(v_6) = 4$ 
Representation for the second se