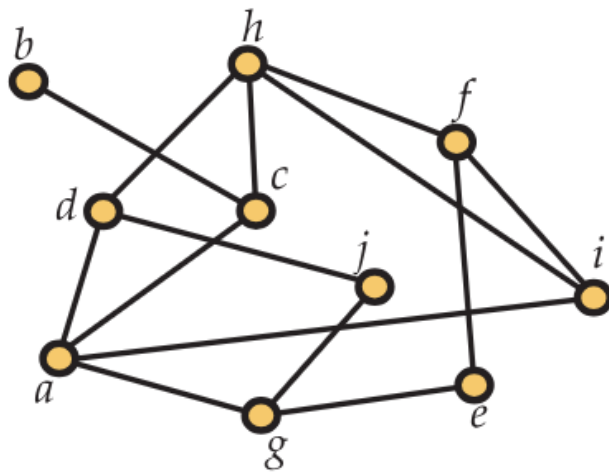1. Consider the following graph G=(V,E) with |V|=10 and |E|=12.

Which of the following is **not** an **induced** subgraph?
(3 points)

A. {{a,d},{d,j},{g,j},{a,g}}

B. {{a,d},{d,j},{g,j},{a,g},{g,e}}

C. {{a,d},{d,j},{g,j},{a,g},{g,e}, {e,f}}

✓ D. None, all are induced subgraphs.
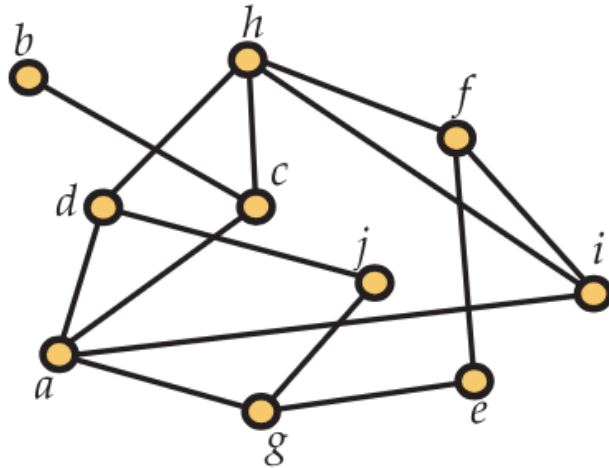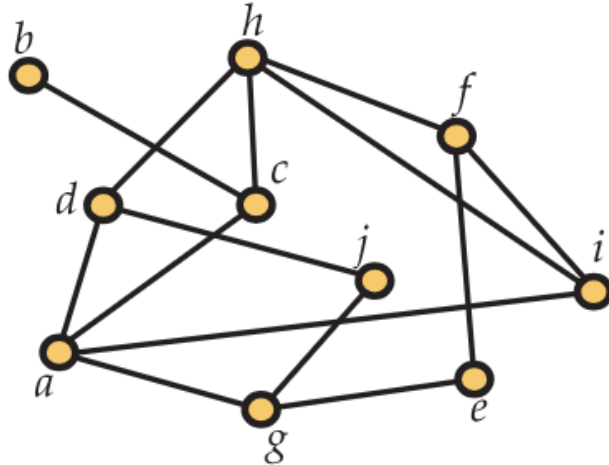
2. Consider the following graph G=(V,E) with |V|=10 and |E|=12.

If you removed vertex **b** (and its incident edges) from G, how many **spanning** subgraphs of the original graph G could you produce? *(3 points)*

✓ A. 0

B. 1

C. 2

D. 10

3. Consider the following graph G=(V,E) with |V|=10 and |E|=12.

Suppose the subgraph G' is obtained from G by removing vertices **h** and **e** (and all their incident edges). What is *K(G')*?
(3 points)

✓ A. 1

  B. 2

  C. 3

  D. 8