Vocab H is a subgraph of G if  $V(H) \subseteq V(G)$  and  $E(H) \subseteq E(G)$ .

(vtx set vtx set of G

Q Which are subgraphs of  $K_5$ ?

(a)  $C_5$  (b)  $P_4$  (c)  $P_5$  (d)  $K_4$ 

More vocab:

- H is an induced subgraph if it contains all the edges of G that connect vertices in V(H).
- H is a spanning subgraph if V(H)=V(G).
- Are any of the above contained as a spanning or induced subgraph of  $K_5$ ?