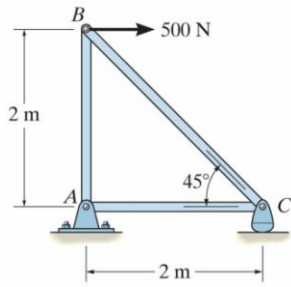
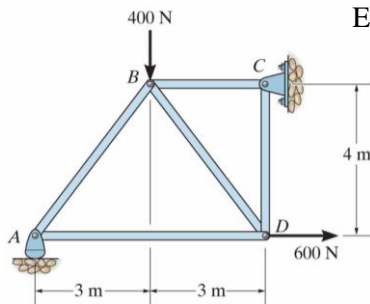


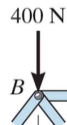
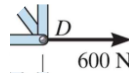
## FBDs for Joints and Members



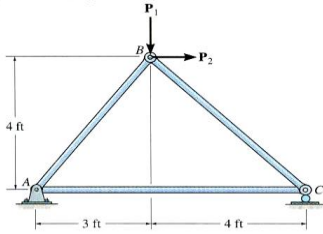
- + Tension (away from FB)
- Compression (towards FB)



Example 1. Find the force in each member.



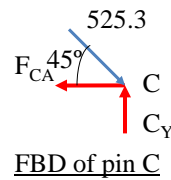
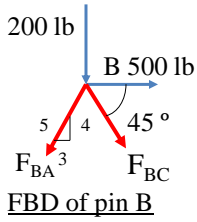
## EXAMPLE 2



**Given:**  $P_1 = 200 \text{ lb}$ ,  $P_2 = 500 \text{ lb}$

**Find:** The forces in each member of the truss.

**Plan:** First analyze pin B and then pin C



## Zero-Force Members

- Inspection can determine that  $F = 0$  for some members.
- Look for collinear members with no applied loads.

