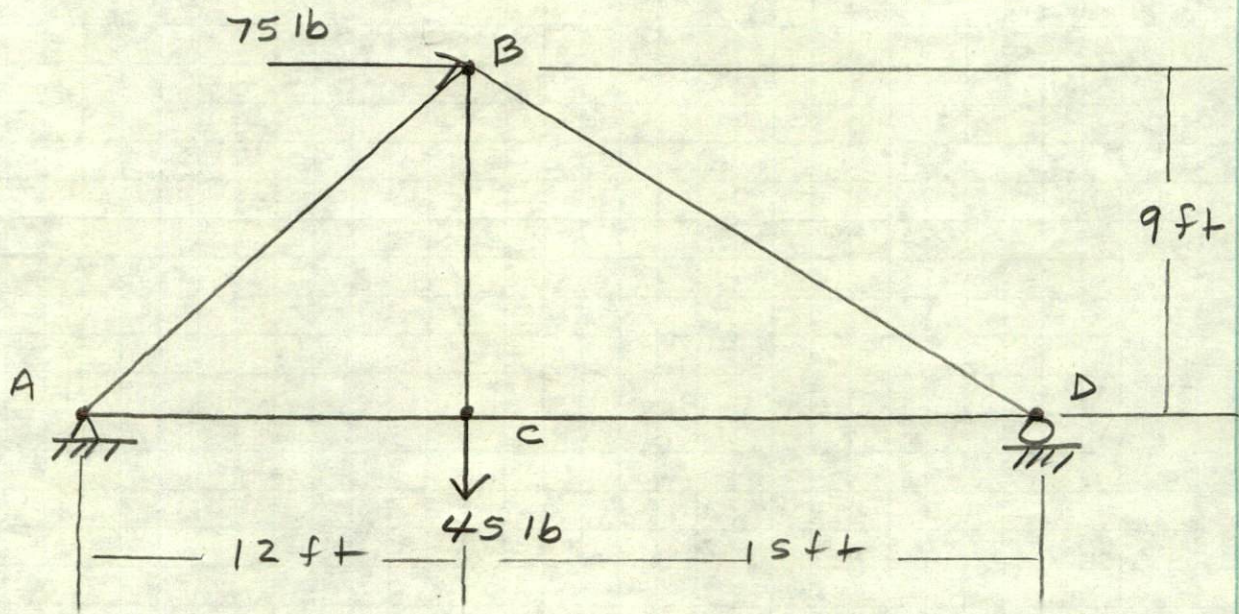
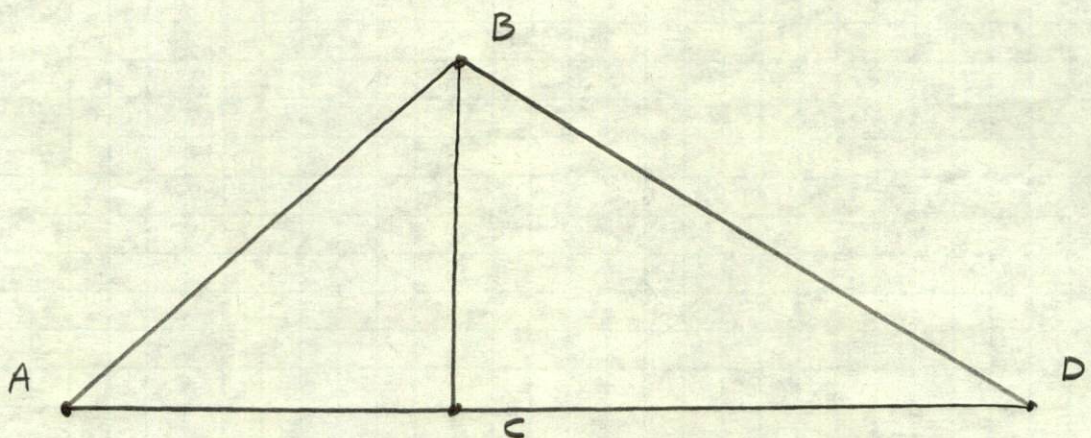


1. Complete the following steps to determine the force in each member of the truss using the Method of Joints



- A. Complete the FBD



FBD - Entire Truss

B. use the following equilibrium equations to determine the reactions at A and D.

$$[\sum M_A = 0]$$

$$[\sum F_x = 0]$$

$$[\sum F_y = 0]$$

C. complete the FBD of Joint A

A •

D. Using the FBD for joint A determine the force in members AB and AC.

$$[\sum F_y = 0]$$

$$[\sum F_x = 0]$$

E. complete the FBD for Joint C

• C

F. using the FBD for Joint C determine the force in members BC and CD.

$$[\Sigma F_x = 0]$$

$$[\Sigma F_y = 0]$$

G. Complete the FBD for Joint D

• D

H. Using the FBD for Joint D determine the force in member BD