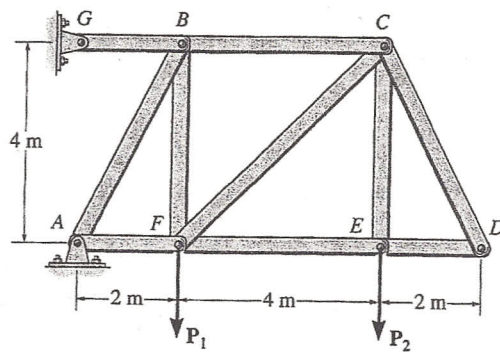
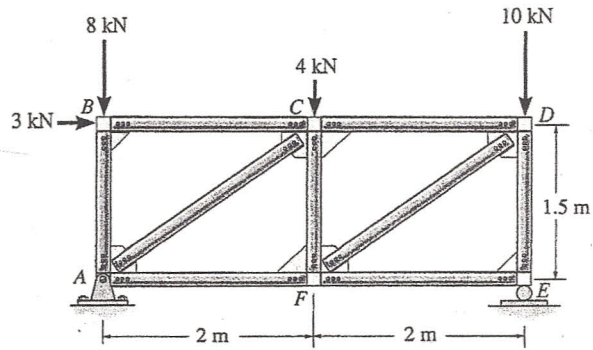
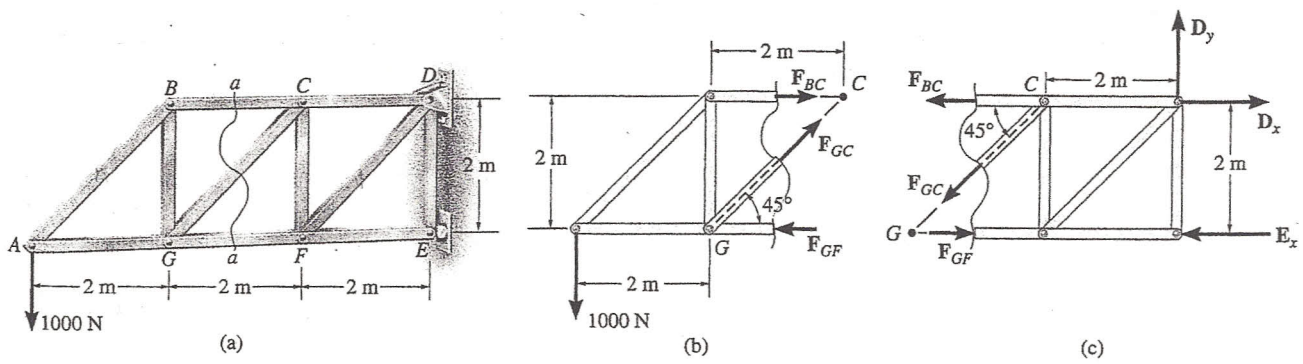


## Method of Joints



## Method of Sections



$$\sum F_x = 0$$

$$\sum M_A = 0$$

$$\sum F_y = 0$$

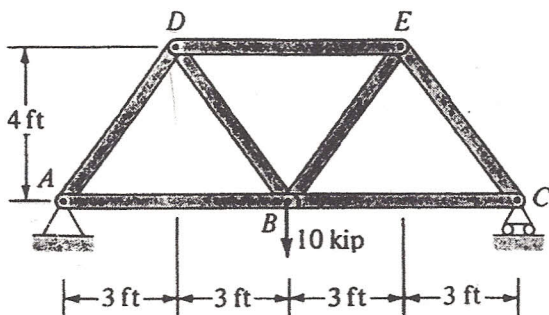
$$-10(6) + C_y(12) = 0$$

$$A_y - 10 + 5 = 0$$

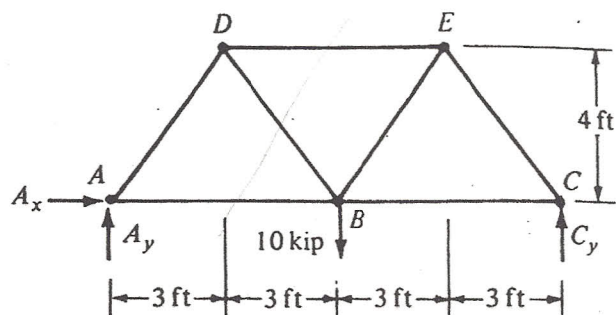
$$A_x = 0$$

$$C_y = 5 \text{ kip} \uparrow$$

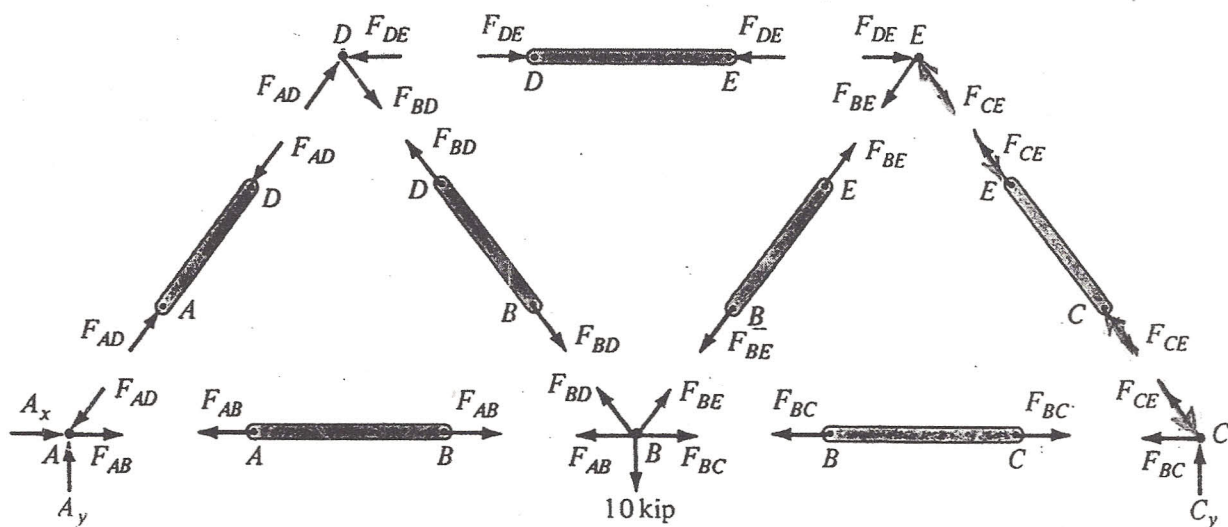
$$A_y = 5 \text{ kip} \uparrow$$



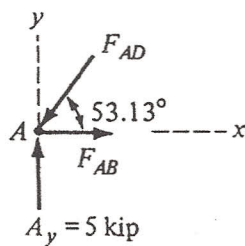
(a)



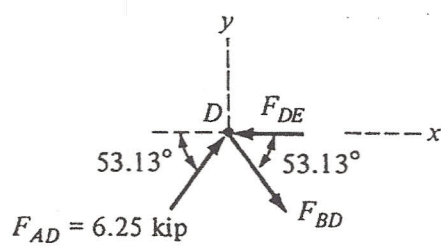
(b)



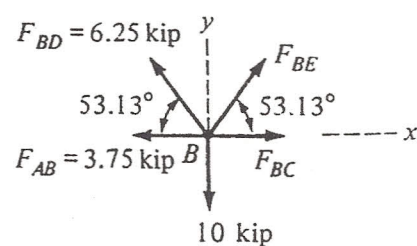
(c)



(d)



(e)



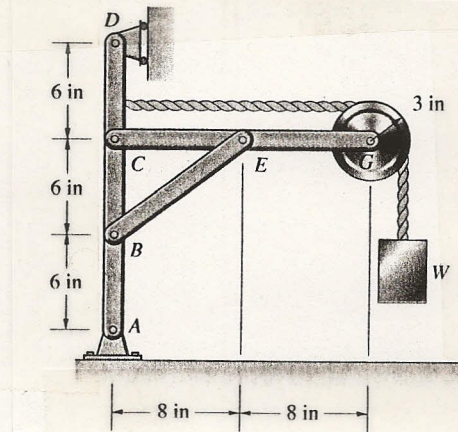
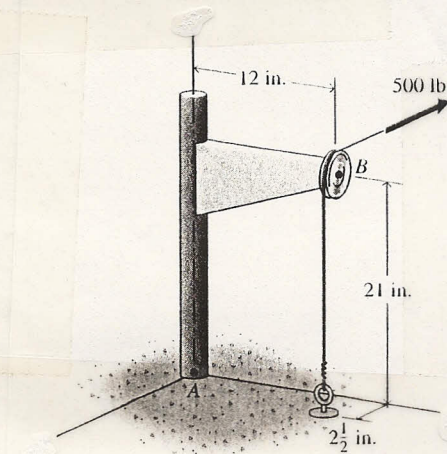
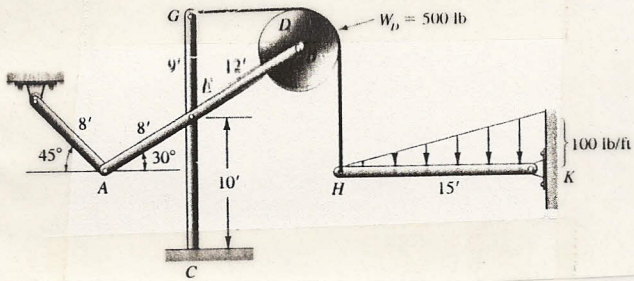
(f)

NAME: \_\_\_\_\_

SID # \_\_\_\_\_

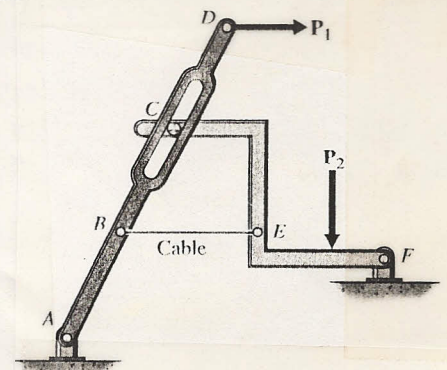
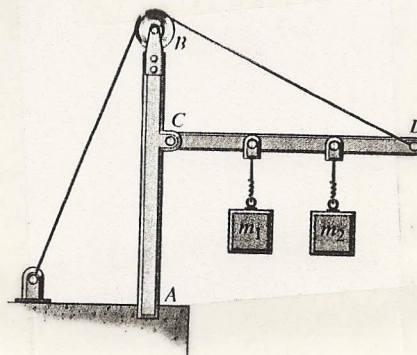
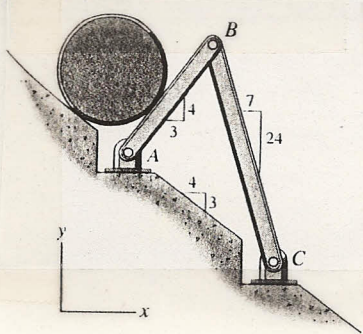
## Question 1 :

For the structures shown find reactions in each support and forces acting on each members.



## Question 2:

For each structure shown draw Free-Body-Diagram



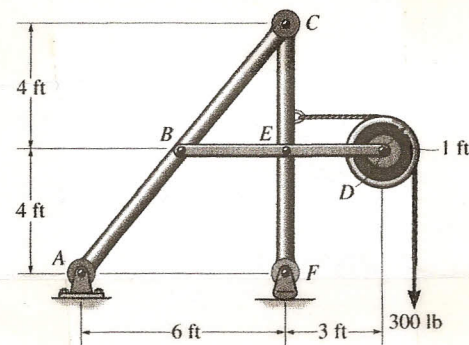


NAME: \_\_\_\_\_

SID # \_\_\_\_\_

Question 1: (20 Points)

In the frame shown determine the horizontal and vertical forces acting at each joint on all members. The radius of frictionless pulley is 1-ft. Support A is a hinge and F is a rocker.



\*6-116. The compound shears are used to cut metal parts. Determine the vertical cutting force exerted on the rod  $R$  if a force of  $F = 20$  lb is applied at the grip  $G$ . The lobe  $CDE$  is in smooth contact with the head of the shear blade at  $E$ .

