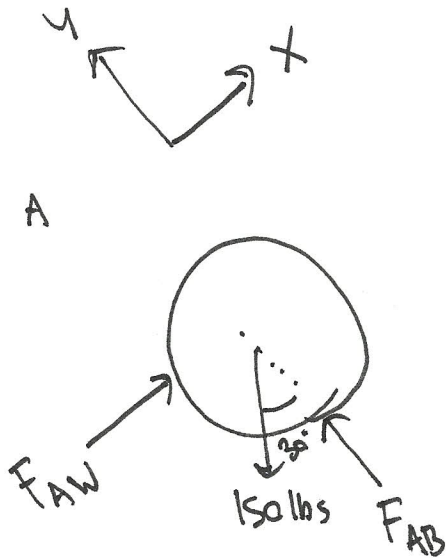
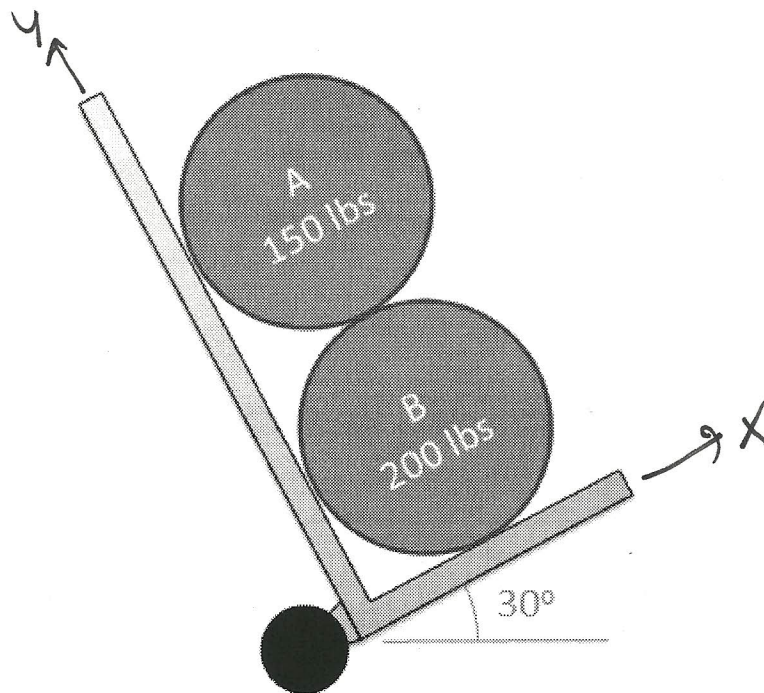
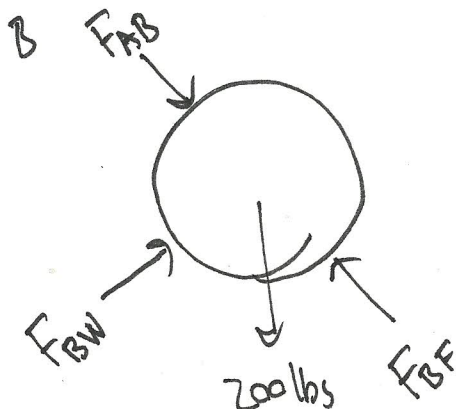


Barrels A and B are supported in a foot truck as seen below. Assuming the barrels are in equilibrium, determine all forces acting on barrel B.



$$A \begin{cases} \sum F_x = F_{AW} - 150 \sin(30) = 0 \\ \sum F_y = F_{AB} - 150 \cos(30) = 0 \end{cases}$$

$$F_{AB} = 129.9 \text{ lbs}$$



$$B \begin{cases} \sum F_x = F_{BW} - 200 \sin(30) = 0 \\ \sum F_y = F_{BF} - 129.9 \text{ lbs} - 200 \cos(30) = 0 \end{cases}$$

$$F_{BW} = 100 \text{ lbs}$$

$$F_{BF} = 303.1 \text{ lbs}$$