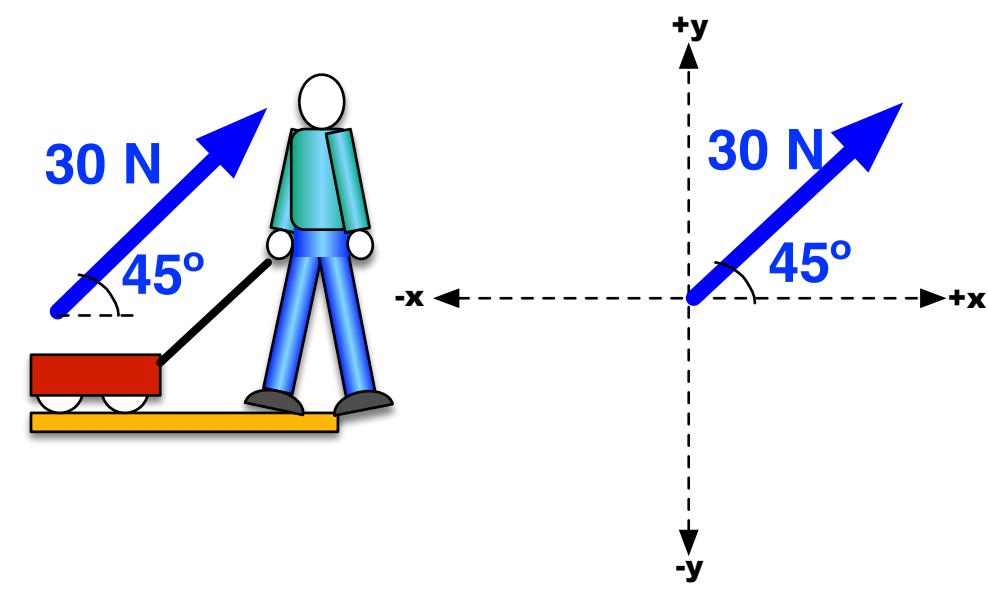
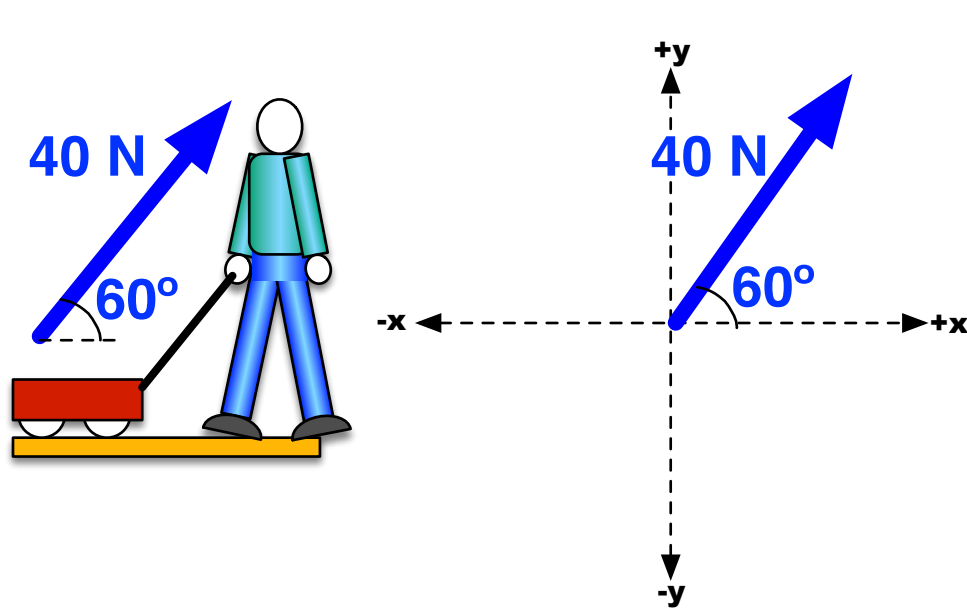
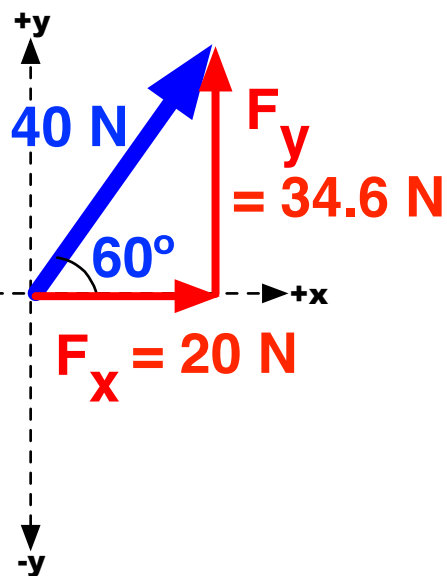
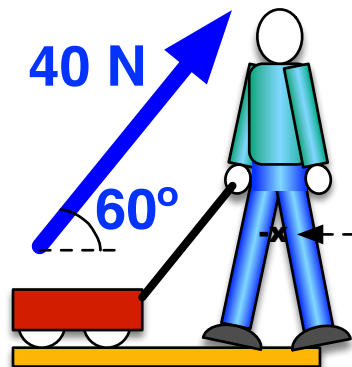


Sketch the x and y components. Calculate their size using Trig.



Sketch the x and y components. Calculate their size using Trig.



$$\cos(\text{angle}) = \frac{F_x}{F}$$

$$\cos(60^\circ) = \frac{F_x}{40 \text{ N}}$$

$$0.5 = \frac{F_x}{40 \text{ N}}$$

$$0.5(40 \text{ N}) = F_x$$

$$20 \text{ N} = F_x$$

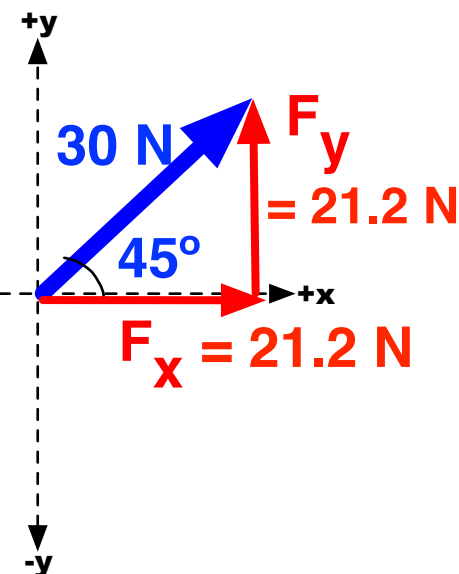
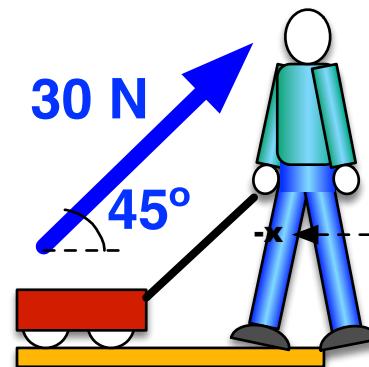
$$\sin(\text{angle}) = \frac{F_y}{F}$$

$$\sin(60^\circ) = \frac{F_y}{40 \text{ N}}$$

$$0.866 = \frac{F_y}{40 \text{ N}}$$

$$0.866(40 \text{ N}) = F_y$$

$$34.6 \text{ N} = F_y$$



$$\cos(\text{angle}) = \frac{F_x}{F}$$

$$\cos(45^\circ) = \frac{F_x}{30 \text{ N}}$$

$$0.707 = \frac{F_x}{30 \text{ N}}$$

$$0.707(30 \text{ N}) = F_x$$

$$21.2 \text{ N} = F_x$$

$$\sin(\text{angle}) = \frac{F_y}{F}$$

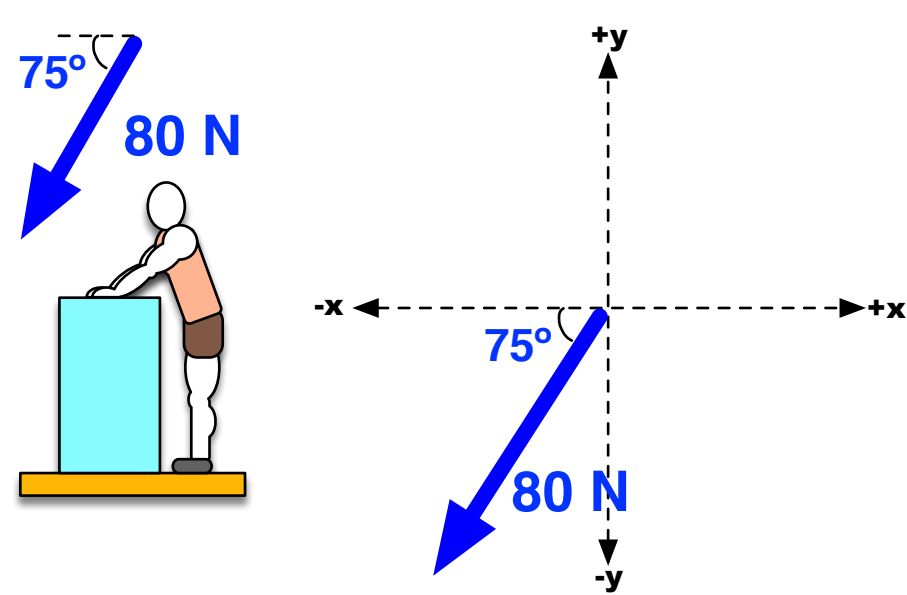
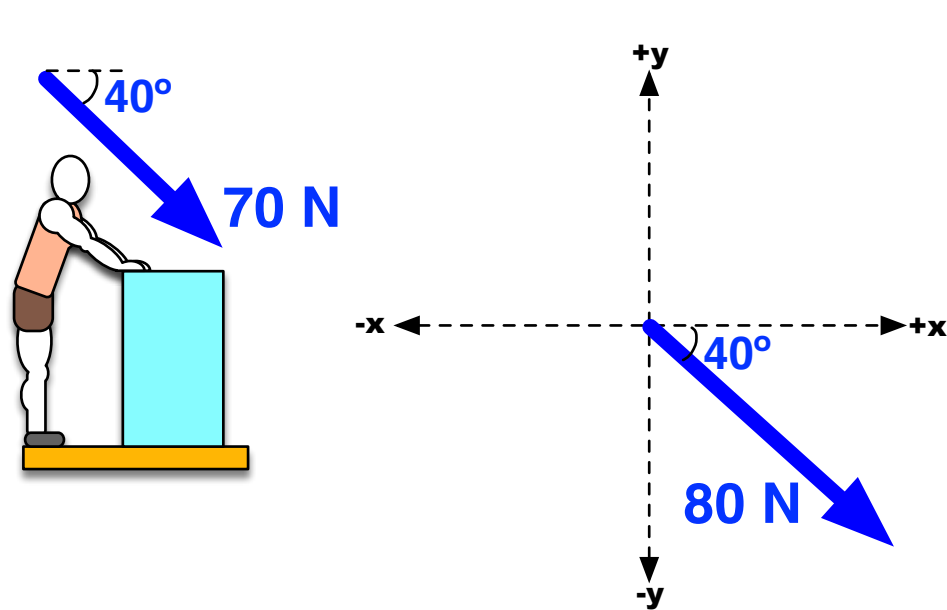
$$\sin(45^\circ) = \frac{F_y}{30 \text{ N}}$$

$$0.707 = \frac{F_y}{30 \text{ N}}$$

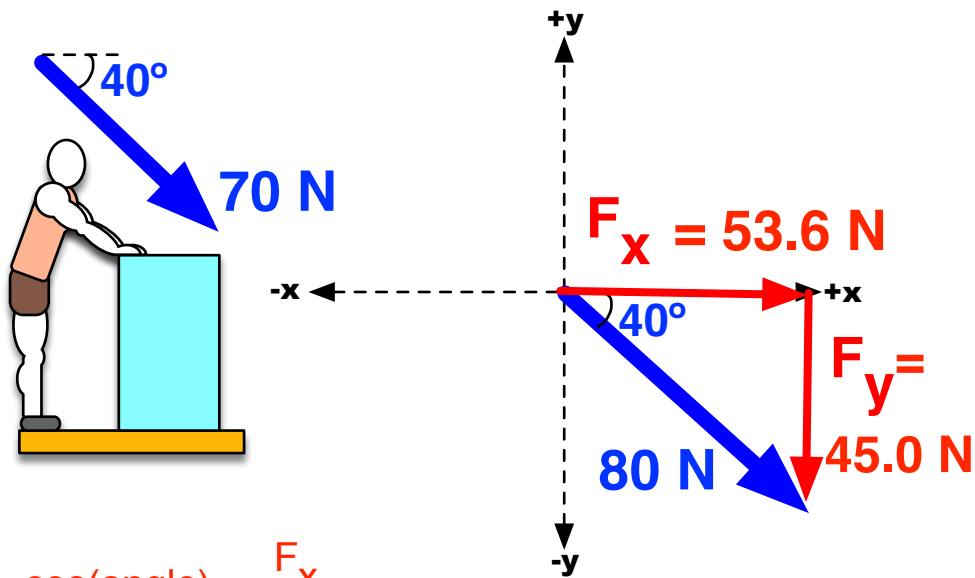
$$0.707(30 \text{ N}) = F_y$$

$$21.2 \text{ N} = F_y$$

Sketch the x and y components. Calculate their size using Trig.



Sketch the x and y components. Calculate their size using Trig.



$$\cos(\text{angle}) = \frac{F_x}{F}$$

$$\cos(40^\circ) = \frac{F_x}{70 \text{ N}}$$

$$0.766 = \frac{F_x}{70 \text{ N}}$$

$$0.766(70 \text{ N}) = F_x$$

$$53.6 \text{ N} = F_x$$

$$\sin(\text{angle}) = \frac{F_y}{F}$$

$$\sin(40^\circ) = \frac{F_y}{70 \text{ N}}$$

$$0.643 = \frac{F_y}{70 \text{ N}}$$

$$0.643(70 \text{ N}) = F_y$$

$$45.0 \text{ N} = F_y$$



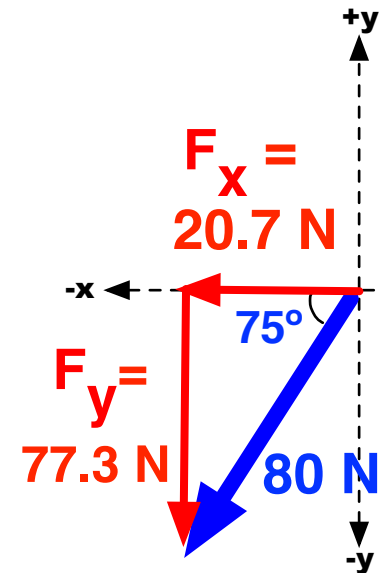
$$\cos(\text{angle}) = \frac{F_x}{F}$$

$$\cos(75^\circ) = \frac{F_x}{80 \text{ N}}$$

$$0.259 = \frac{F_x}{80 \text{ N}}$$

$$0.259(80 \text{ N}) = F_x$$

$$20.7 \text{ N} = F_x$$



$$\sin(\text{angle}) = \frac{F_y}{F}$$

$$\sin(75^\circ) = \frac{F_y}{80 \text{ N}}$$

$$0.966 = \frac{F_y}{80 \text{ N}}$$

$$0.966(80 \text{ N}) = F_y$$

$$77.3 \text{ N} = F_y$$