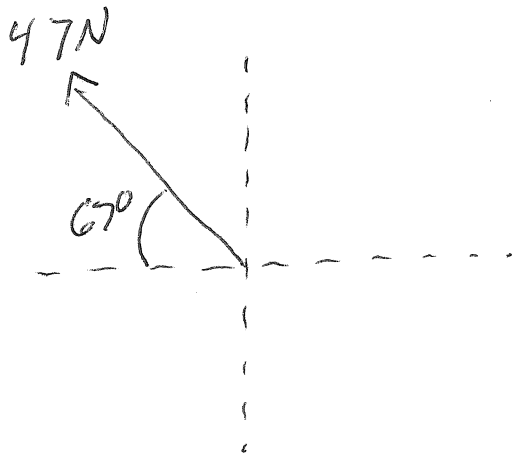
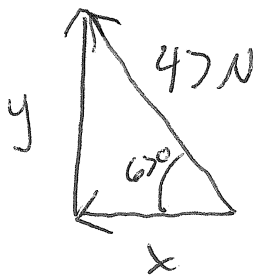


Example



Determine the components of the vector.



$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\cos 67 = \frac{x}{47N}$$

$$x = 47N (\cos 67)$$

$$= 18.36$$

$$\boxed{18N}$$

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\sin 67 = \frac{y}{47N}$$

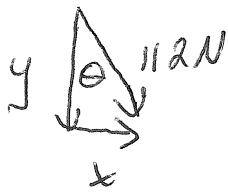
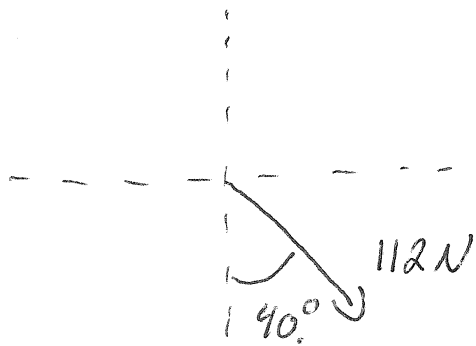
$$y = 47N \sin 67$$

$$= 43.26$$

$$\boxed{43N}$$

Example

Determine the components of the vector.



~~Faa~~

$$\sin \theta = \frac{\text{opp}}{\text{hyp}}$$

$$\sin 40^\circ = \frac{x}{112 N}$$

$$x = 112 N (\sin 40)$$
$$= 71.99 N$$

$$\boxed{72 N}$$

$$\cos \theta = \frac{\text{adj}}{\text{hyp}}$$

$$\cos 40 = \frac{y}{112 N}$$

$$y = 112 (\cos 40)$$
$$= 85.797$$

$$\boxed{86 N}$$