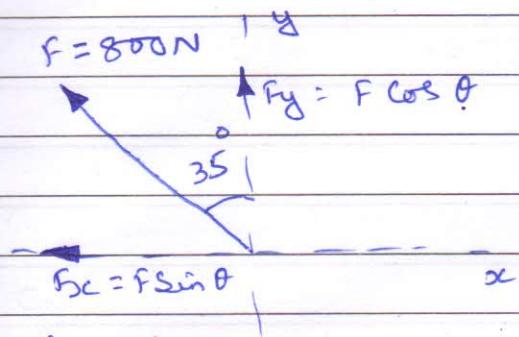


2/1, pg 32



Given :-

$$F = 800 \text{ N}, \theta = 35^\circ$$

To find

Express F as a vector, x & y scalar components of F

$$\text{Solution: } \vec{F} = F_x \mathbf{i} + F_y \mathbf{j}$$

$$= -F \sin \theta \mathbf{i} + F \cos \theta \mathbf{j}$$

$$= -800 \times \sin 35^\circ \mathbf{i} + 800 \times \cos 35^\circ \mathbf{j}$$

$$\vec{F} = -458.86 \mathbf{i} + 655.32 \mathbf{j} \text{ N}$$

Scalar components of F

$$F_x = -458.86 \text{ N}$$

$$F_y = 655.32 \text{ N}$$