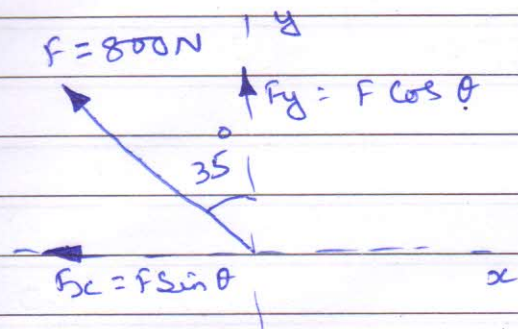


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Given :

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

To find

Express F as a vector, x & y scalar components of F Solution: $\vec{F} = F_x \hat{i} + F_y \hat{j}$

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

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

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

Scalar components of F

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

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