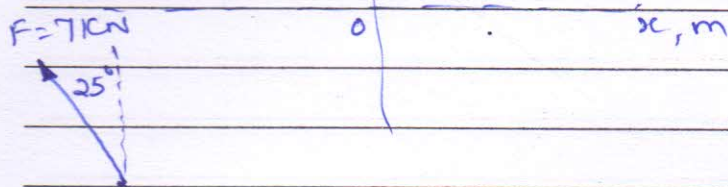


2/2

H, m



$A(-4, -5)$

Given:-

$$F = 7 \text{ kN}, \quad \theta = 25$$

To find

Express F as a vector, x & y component of F

Solution

$$\vec{F} = F_x \hat{i} + F_y \hat{j}$$

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

$$= -7 \times \sin 25^\circ + 7 \times \cos 25^\circ \hat{j}$$

$$= -2.96 \hat{i} + 6.34 \hat{j} \text{ kN}$$

Scalar Components

$$F_x = -2.96 \text{ kN}$$

$$F_y = 6.34 \text{ kN}$$