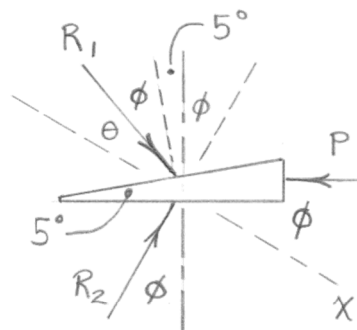
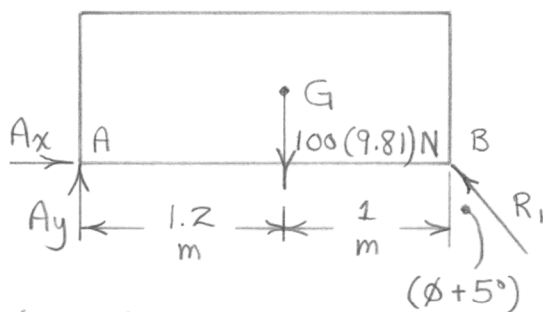


6/56

$$\phi = \tan^{-1}(0.60) = 31.0^\circ$$



(Door)

$$\sum M_A = 0: R_1 \cos(31.0^\circ + 5^\circ)(2.2) - 100(9.81)(1.2) = 0$$

$$R_1 = 661 \text{ N}$$

(Wedge) (Note $\theta = 90^\circ - 2\phi - 5^\circ = 23.1^\circ$)

$$\sum F_x = 0: 661 \cos 23.1^\circ - P \cos 31.0^\circ = 0$$

$$P = 709 \text{ N}$$

WILEY