

**1-4\***

The equations of equilibrium

$$\rightarrow \Sigma F_x = 0: \quad A_x - N_B \sin 45^\circ = 0$$

$$\uparrow \Sigma F_y = 0: \quad A_y + N_B \cos 45^\circ - 300 = 0$$

$$\curvearrowright \Sigma M_A = 0: \quad 1.5(N_B \cos 45^\circ) - 1.5(300) = 0$$

are solved to get

$$N_B = 424.264 \text{ N} \cong 424 \text{ N} \quad \text{Ans.}$$

$$A_x = 300 \text{ N} \quad A_y = 0 \text{ N}$$

$$A = 300 \text{ N} \rightarrow \quad \text{Ans.}$$

