

$$\sum F_x = 0 \Rightarrow P_x - T = 0$$

$$P_x = T \quad (1)$$

$$\sum F_y = 0 \Rightarrow P_y - 100 = 0$$

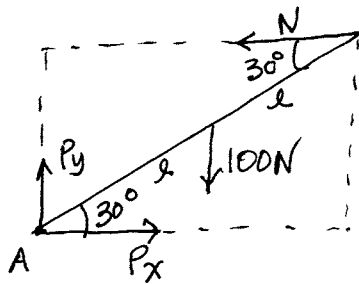
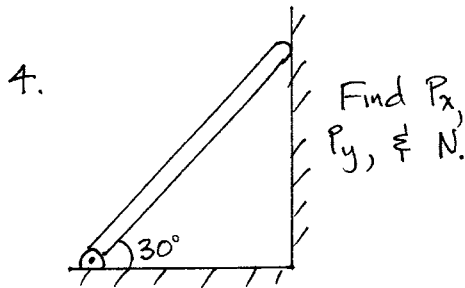
$$\boxed{P_y = 100 \text{ N}}$$

$$\sum \tau_A = 0 \Rightarrow (2l \cos 30^\circ) T - (l \sin 30^\circ) 100 = 0$$

$$T = \frac{100 \sin 30^\circ}{2 \cos 30^\circ}$$

$$\boxed{T = 28.9 \text{ N}} \quad (2)$$

$$\text{From (1) \& (2)} \quad \boxed{P_x = 28.9 \text{ N}}$$



$$\sum F_x = 0 \Rightarrow P_x - N = 0$$

$$P_x = N \quad (1)$$

$$\sum F_y = 0 \Rightarrow P_y - 100 = 0$$

$$\boxed{P_y = 100 \text{ N}}$$

$$\sum \tau_A = 0 \Rightarrow -100(l \cos 30^\circ) + N(2l \sin 30^\circ) = 0$$

$$N = \frac{100 \cos 30^\circ}{2 \sin 30^\circ} = \boxed{86.6 \text{ N}} \quad (2)$$

$$\text{From (1) \& (2)} \quad \boxed{P_x = 86.6 \text{ N}}$$