

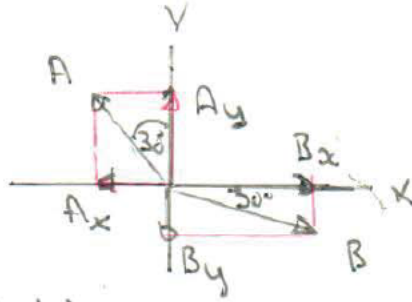
①

4A

(1)(b) $A_x = -6 \sin 30^\circ$

$\therefore A_x = -3 \text{ N}$

$A_y = 6 \cos 30^\circ = 5,2 \text{ N}$

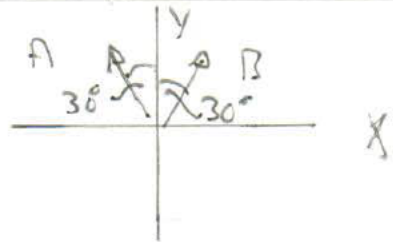


$B_x = 4 \cos 30^\circ = 3,46 \text{ N}$

$B_y = -4 \sin 30^\circ = -2 \text{ N}$

(d) $A_x = -5 \sin 30^\circ = -2,5 \text{ N}$

$A_y = 5 \cos 30^\circ = 4,3 \text{ N}$

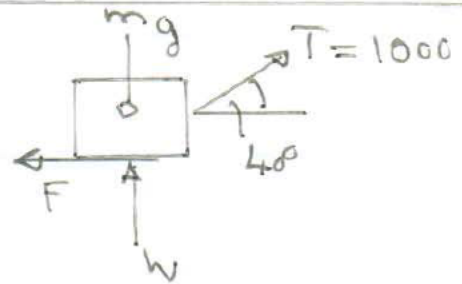


$B_x = 2,5 \text{ N}; B_y = 4,3 \text{ N}$

(5) $\Rightarrow \Sigma F_{xc} = m a$

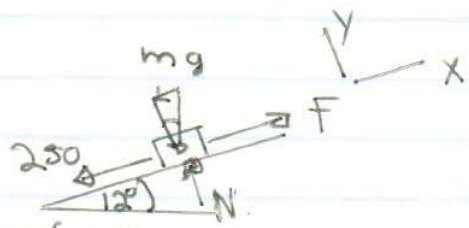
$-F + 1000 \cos 40^\circ = 750(0,8)$

$\therefore F = 166 \text{ N}$



(2)

4B



$$(3) \rightarrow \sum F = ma$$

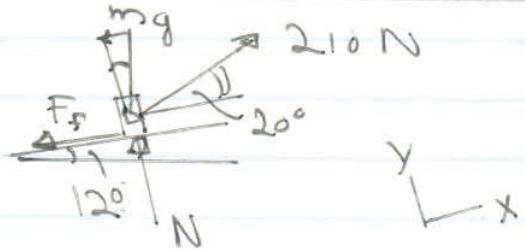
$$-250 - 850(10)\sin 12^\circ + F = 850(0,3)$$

$$\therefore F = 2272 \text{ N}$$

$$(8) \rightarrow \sum F_x = ma = 0$$

$$210 \cos 20^\circ - 78(10)\sin 12^\circ - F_g = 0$$

$$\therefore F_g = 35,2 \text{ N}$$



$$\rightarrow \sum F_y = 0$$

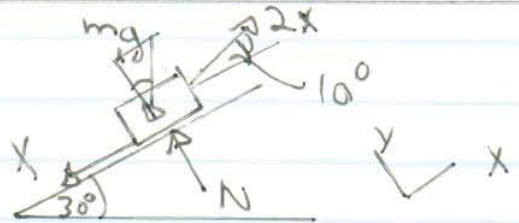
$$\therefore -78(10)\cos 12^\circ + 210 \sin 20^\circ + N = 0$$

$$\therefore N = 691 \text{ N}$$

$$(13) \rightarrow \sum F_x = ma$$

$$-X + 2X \cos 10^\circ - 12(10)\sin 30^\circ = 12(1,75)$$

$$\therefore X = 83,5 \text{ N}$$



$$\rightarrow \sum F_y = 0: N - 12(10)\cos 30^\circ + 2(83,5)\sin 10^\circ = 0$$

$$\therefore N = 74,9 \text{ N}$$