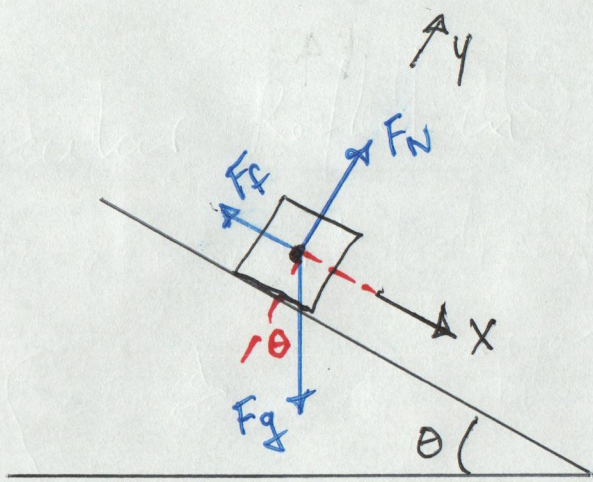
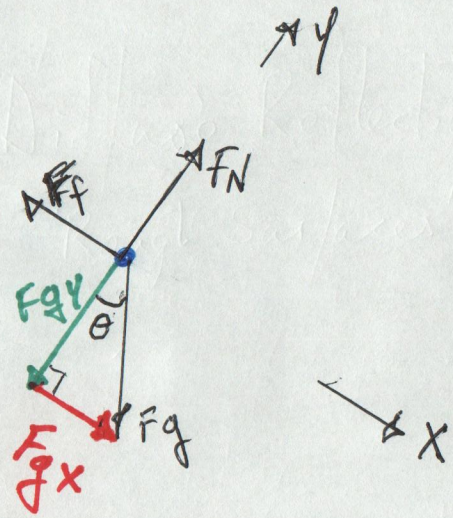


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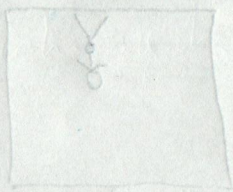


HRHS Physics
Recup
May 19, 2020



$$F_{gx} = F_g \sin \theta$$

$$F_{gy} = F_g \cos \theta$$



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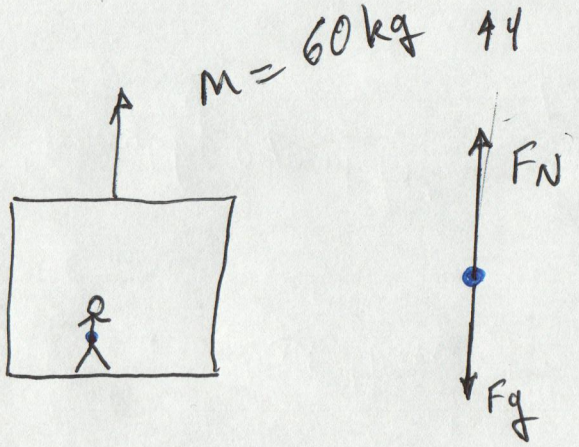
$F_N = m(g + a)$
 $F_N = m(g + 0)$
 $F_N = mg$
 $F_N = 10 \text{ kg} \cdot 10 \text{ m/s}^2$
 $F_N = 100 \text{ N}$

①

②

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4.



$$a = 1.0 \text{ m/s}^2$$

$$F_N = ?$$

$$F_{Rx} = \max$$

$$F_{Ry} = m a_y$$

(2)

$$a) F_y: F_N - F_g = m a_y$$

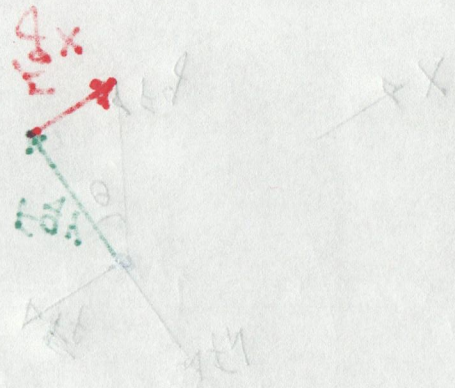
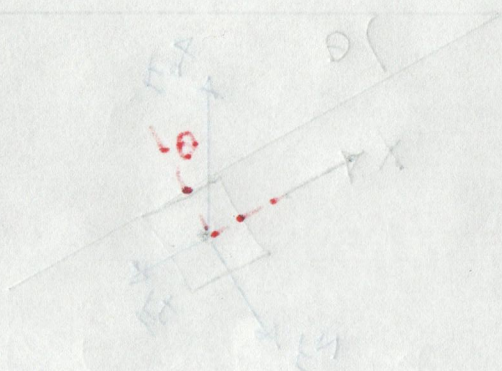
$$F_N = m a + F_g = m a + m g$$

$$F_N = m (a + g)$$

$$= 60 \text{ kg} (1.0 \text{ m/s}^2 + 9.8 \text{ m/s}^2)$$

$$F_N = 648 \text{ N}$$

$$F_N = x \cdot g$$

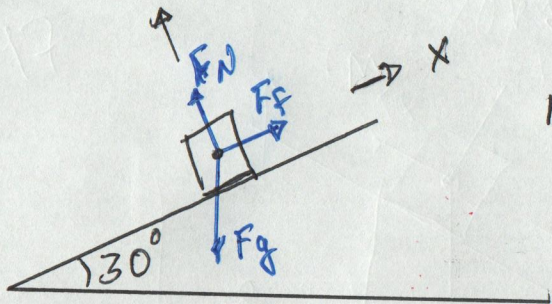


Wird in 5030
 10000
 41542 102107

b' 5030

(1)

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4



$$m = 25 \text{ kg}$$

At rest

$$F_x: F_f - F_{gx} = ma_x = 0$$

$$F_f = F_{gx} = F_g \sin \theta$$

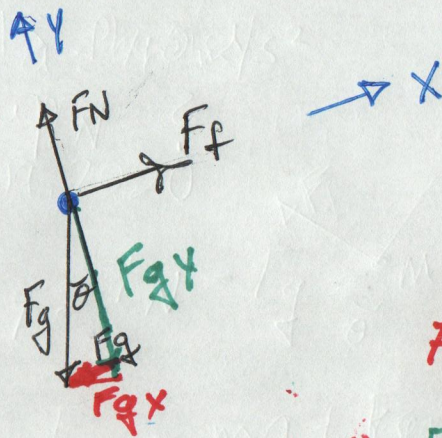
$$F_y: F_N - F_{gy} = ma_y = 0$$

$$F_N = F_{gy} = F_g \cos \theta$$

~~Equation~~

$$F_f = \mu_s F_N$$

$$\mu_s = \frac{F_f}{F_N} = \frac{F_g \sin \theta}{F_g \cos \theta} = \tan \theta$$



$$\theta = 30^\circ$$

$$F_{gx} = F_g \sin \theta$$

$$F_{gy} = F_g \cos \theta$$

$$F_f = mg \sin \theta$$

$$= (25 \text{ kg})(9.8 \text{ m/s}^2)(\sin 30^\circ)$$

$$F_f = 122.5 \text{ N}$$

~~Equation~~

(3)