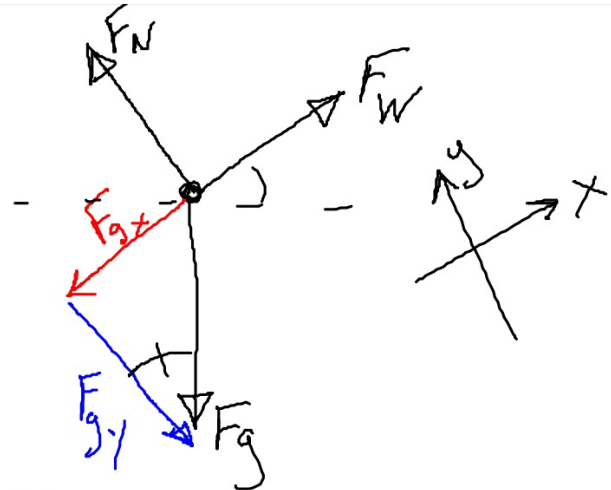
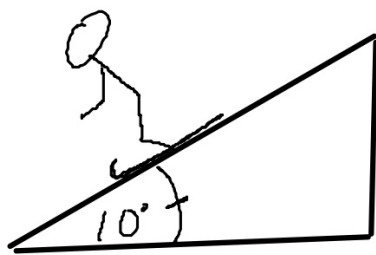


38.



a)  $a = 0$   $F_W = ?$

$$a_x = \frac{\sum F_x}{m} = \frac{F_W - F_{gx}}{m} = 0$$

$$F_W - mg \sin \theta = 0$$

$$F_W = mg \sin \theta = (40)(9.8) \sin 10^\circ = 68 \text{ N}$$

$$b) \quad a = -1 \text{ m/s}^2 \quad a = \frac{F_w - F_{gx}}{m}$$

$$-1 = \frac{F_w - 68}{40}$$

$$\underline{28 \text{ N} = F_w} \quad \text{uphill still}$$

$$c) \quad a = -2 \text{ m/s}^2$$

$$-2 = \frac{F_w - 68}{40}$$

$$-12 \text{ N} = F_w \quad \underline{\underline{-12 \text{ N downhill}}}$$