

$$m = 50 \text{ kg}$$

$$\vec{a} = 10 \text{ m/s}^2$$

$$\vec{F} = m \cdot \vec{a}$$

$$F = 50 \cdot 10 = 500 \text{ N}$$

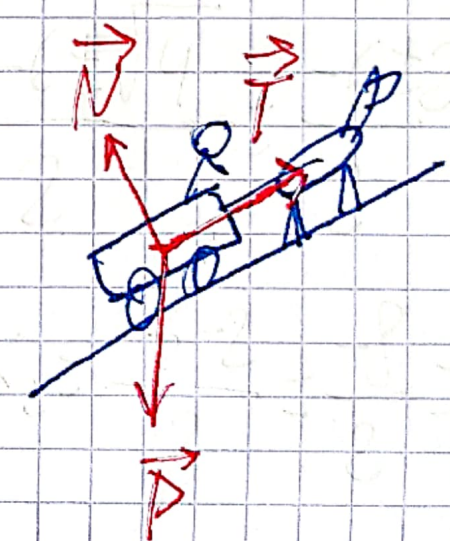
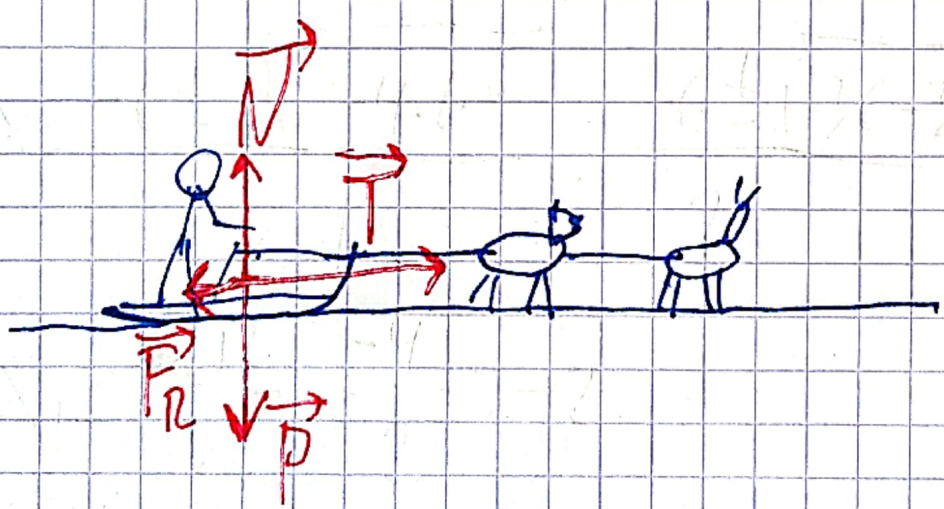
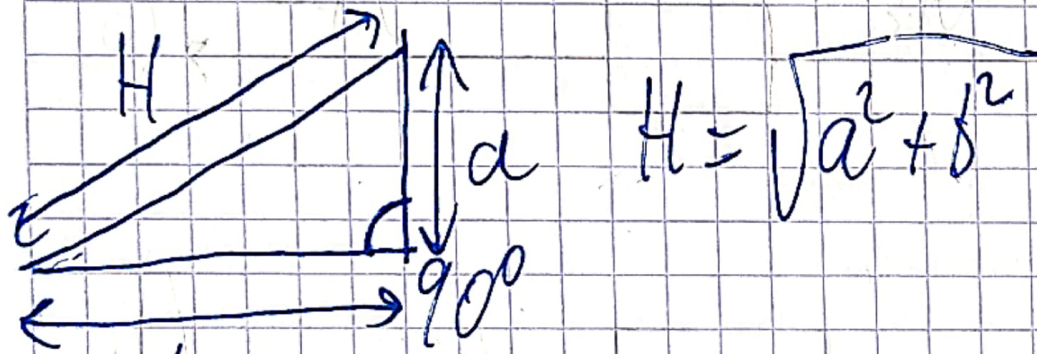
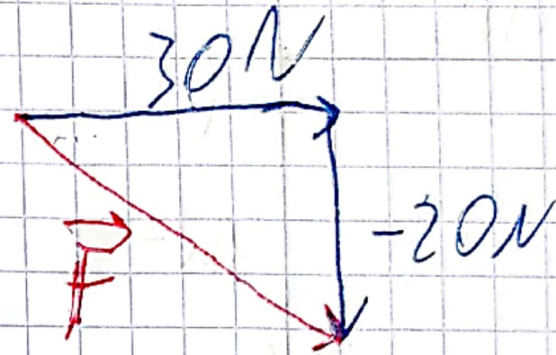


Diagram showing a force  $F$  acting on a surface  $S$ . The pressure  $P$  is calculated as:

$$P = \frac{F}{S} = \frac{1000}{0.4} = 2500 \text{ Pa}$$

Labels: FUEERZA, SUPERFICIE, FROCIÓN



Calculation of the magnitude of the force  $F$ :

$$F = \sqrt{(-20)^2 + 30^2} = \sqrt{400 + 900} = \sqrt{1300} = 36.06 \text{ N}$$



$$\vec{P} = m \cdot \vec{g}$$

$$-1000 = m \cdot (-9.8)$$

$$m = \frac{-1000}{-9.8} = 102.04 \text{ kg}$$

