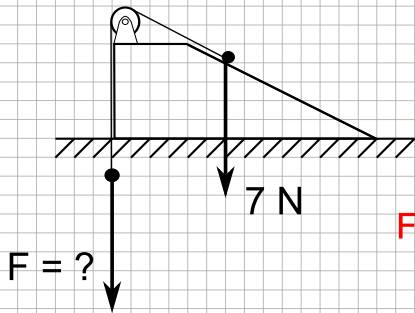


Esercizi sulle macchine semplici - PIANO INCLINATO

Determinare l'entità delle forze incognite in modo tale che i sistemi siano in equilibrio

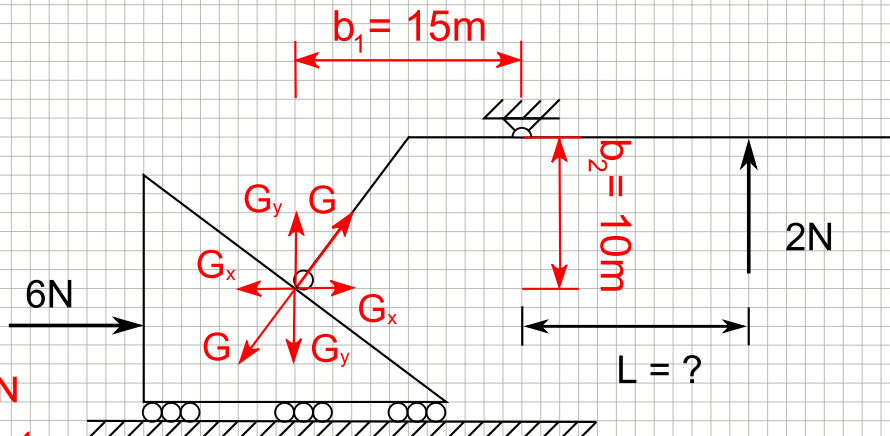
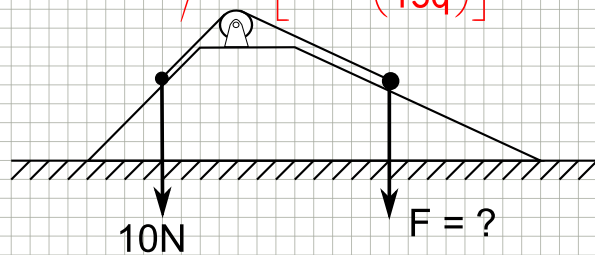
$$F = 7 \text{ N} \cdot \text{sen} \left[\text{arctg} \left(\frac{5q}{10q} \right) \right] \approx 3,13 \text{ N}$$

5 m



$$F \cdot \text{sen} \left[\text{arctg} \left(\frac{6q}{13q} \right) \right] = 10 \text{ N} \cdot \cos 45^\circ$$

$$F = 10 \text{ N} \cdot \cos 45^\circ / \text{sen} \left[\text{arctg} \left(\frac{6q}{13q} \right) \right] \approx 16,87 \text{ N}$$

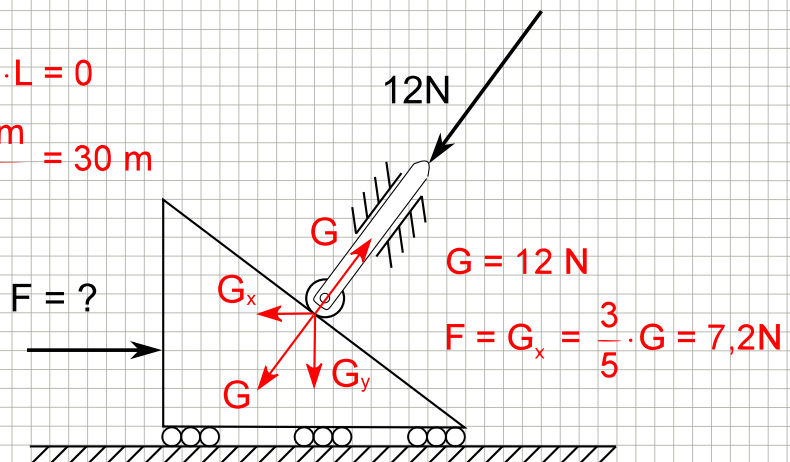


$$G_x = 6 \text{ N}$$

$$G_y = G_x \cdot \frac{4}{3} = 8 \text{ N}$$

$$G_x \cdot 10 \text{ m} - G_y \cdot 15 \text{ m} + 2 \text{ N} \cdot L = 0$$

$$\Rightarrow L = \frac{G_y \cdot 15 \text{ m} - G_x \cdot 10 \text{ m}}{2 \text{ N}} = 30 \text{ m}$$



$$G = 12 \text{ N}$$

$$F = G_x = \frac{3}{5} \cdot G = 7,2 \text{ N}$$