

$$h: 2,5 \text{ m}$$

$$l_1: 5,0 \text{ m}$$

$$l_2: 12,00 \text{ m}$$

$$l_3: 14,60 \text{ m}$$

$$F_P = 630 \frac{\text{kg}}{\text{s}} \cdot 9,8 \frac{\text{N}}{\text{kg}} = 6174 \text{ N}$$

$$m = 630 \text{ kg}$$

$$F_{\text{max}}: 1,5 \cdot 10^3 \text{ N}$$

$$F_1 = F_P \cdot \frac{h}{l} = 6174 \text{ N} \cdot \frac{2,5 \text{ m}}{5,0 \text{ m}} =$$

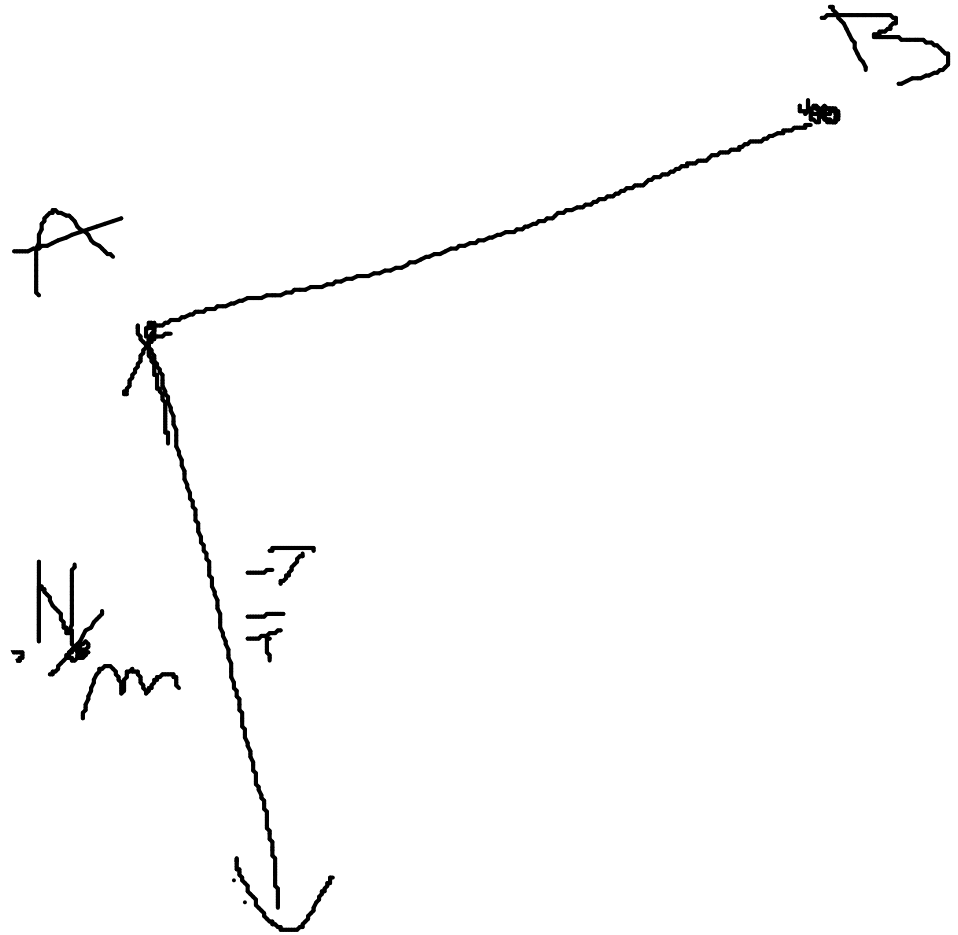
$$= 3087 \text{ N}$$

$$F_2 = 1180 \text{ N} \quad F_3 = 1102 \text{ N}$$

$$l = 120 \text{ cm}$$

$$F = 25 \text{ N}$$

$$M = F \times d = 25 \text{ N} \cdot 120 \text{ cm} = 3000 \text{ N} \cdot \text{cm}$$



$$l_1 = 2.0 \text{ m}$$

$$F_1 = 10 \text{ N}$$

$$M_1 = M_2$$

$$M = F \cdot d$$

$$F_1 \cdot l_1 = F_2 \cdot l_2$$

$$l_2 = 5.0 \text{ m}$$

$$F_2 = ?$$

$$F_2 = \frac{F_1 \cdot l_1}{l_2} = \frac{10 \text{ N} \cdot 2.0 \text{ m}}{5.0 \text{ m}} = 4 \text{ N}$$

$$l_1 = 50 \text{ mm}$$

$$l_2 = ?$$

$$F_1 = 17 F_2$$

$$F_1 \cdot l_1 = F_2 \cdot (l_2)$$

$$l_2 = \frac{F_1 \cdot l_1}{F_2} = \frac{17 F_2 \cdot l_1}{F_2} = 17 \cdot l_1 = 17 \cdot 50 \text{ mm}$$

$$= 850 \text{ mm} = 0.85 \text{ m}$$