

5) STOJ NA JEDNÉ NOZE

$$m = 80 \text{ kg} \quad (F = m \cdot g)$$

$$F_{TL} = 800 \text{ N}$$

$$S = 150 \text{ cm}^2 = 1,5 \text{ dm}^2 = 0,015 \text{ m}^2$$

$$p = ?$$

$$p = F_{TL} : S$$

$$p = 800 : 0,015 \cdot 1000$$

$$p = 800000 : 15$$

$$p = \underline{\underline{53\,333 \text{ Pa} \approx 53 \text{ kPa}}}$$

VYNIKNE TLAK PŘIBLIŽNĚ 53 kPa.

6) BAGR A CESTA

$$F_{TL} = ?$$

$$S = 5 \text{ m}^2$$

$$p = 40 \text{ kPa} = 40\,000 \text{ Pa}$$

$$F_{TL} = p \cdot S$$

$$F_{TL} = 40\,000 \cdot 5$$

$$F_{TL} = 200\,000 \text{ N} =$$

$$= \underline{\underline{200 \text{ kN}}}$$

BAGR PŮSOBÍ NA CESTU SILOU 200 kN.

7) TRAKTOR A ZEM

$$S = 2,5 \text{ m}^2$$

$$p = 50 \text{ kPa} = 50\,000 \text{ Pa}$$

$$F_{TL} = ?$$

$$F_{TL} = p \cdot S$$

$$F_{TL} = 50\,000 \cdot 2,5$$

$$F_{TL} = \underline{\underline{125\,000 \text{ N} = 125 \text{ kN}}}$$

TRAKTOR PŮSOBÍ TLAKOVOU SILOU 125 kN.

8) PLOCHA A TLAK

$$F_{TL} = ?$$

$$S = 2 \text{ dm}^2 = 0,02 \text{ m}^2$$

$$p = 15\,000 \text{ Pa}$$

$$F_{TL} = p \cdot S$$

$$F_{TL} = 15\,000 \cdot 0,02$$

$$F_{TL} = \underline{\underline{300 \text{ N}}}$$

MUSÍME PŮSOBIT SILOU 300 N

9) KRASOBUSLAŘKA A LED

$$p = ?$$

$$m = 60 \text{ kg}$$

$$F_{TL} = 600 \text{ N}$$

$$S = 8 \text{ cm}^2 = 0,08 \text{ dm}^2 = \\ = 0,0008 \text{ m}^2$$

$$p = F_{TL} : S$$

$$p = \frac{600 : 0,0008 \cdot 10000}{6000000 : 8} =$$

$$\underline{\underline{750\,000 \text{ Pa} = 750 \text{ kPa}}}$$

KRASOBUSLAŘKA PŮSOBÍ TLAKEM 750 kPa