



$$S = S_1 + S_2 = (20 \text{ cm}^2) + (20 \text{ cm}^2) = 40 \text{ cm}^2$$

$$P = \frac{F}{S} = \frac{\text{PESO PERSONA}}{\text{SUPERFICIE}}$$

$$P = \frac{m \cdot g}{S} = \frac{(60 \text{ kg}) \cdot (9.8 \text{ m/s}^2)}{40 \text{ cm}^2}$$

Pasamos todo a unidades del Sistema Internacional:

$$40 \text{ cm}^2 \cdot \frac{1 \text{ m}^2}{100^2 \text{ cm}^2} = 4 \cdot 10^{-3} \text{ m}^2$$

$$\begin{array}{l} 1 \text{ m}^2 \\ 10^2 \text{ dm}^2 \\ 100^2 \text{ cm}^2 \end{array}$$

Resolvamos el ejercicio:

$$P = \frac{(60 \text{ kg}) \cdot (9.8 \text{ m/s}^2)}{4 \cdot 10^{-3} \text{ m}^2} = \frac{60 \cdot 9.8}{4 \cdot 10^{-3}} \cdot \frac{\cancel{\text{kg}} \cdot \cancel{\frac{\text{m}}{\text{s}^2}}}{\cancel{\text{m}^2}} =$$

$$P = \frac{60 \cdot 9.8}{4 \cdot 10^{-3}} \cdot \frac{\text{kg}}{\text{m} \cdot \text{s}^2} \equiv \frac{60 \cdot 9.8}{4 \cdot 10^{-3}} \text{ Pa} ; 1 \text{ Pa} = 1 \frac{\cancel{\text{kg}}}{\cancel{\text{m}} \cdot \cancel{\text{s}^2}}$$

$$P = \frac{60 \cdot 9.8}{4} \cdot 10^{+3} \text{ Pa} = 147 \cdot 10^3 \text{ Pa} \equiv 1.47 \cdot 10^5 \text{ Pa}$$

$$P = 1.47 \cdot 10^5 \text{ Pa} \cdot \frac{1 \text{ kPa}}{100 \text{ Pa}} = 1.47 \cdot 10^3 \text{ kPa} = \text{Presión}$$