

Trabajo de esfera y sólidos de revolución

$$\begin{aligned} 2) \quad \frac{\pi \cdot r^2}{4 \pi r^2} &= 100 \\ \frac{1}{4} &= 100 \\ 1 &= 400 \\ \boxed{200} \end{aligned}$$

$$\begin{aligned} 3) \quad 2\pi R \cdot h &= 80\pi & \left\{ \begin{array}{l} A_b = \pi \cdot 8^2 \\ A_b = 64\pi \end{array} \right. \\ 40 \cdot h &= 40 \\ h &= 4 \\ \hline 6^2 + r^2 &= 10^2 \\ 3 \quad 6 + r &= 100 \\ r^2 &= 64 \\ r &= 8 \end{aligned}$$

$$\begin{aligned} 6) \quad V &= 2\pi \cdot 4 \cdot 2\pi & \left\{ \begin{array}{l} V = \Delta \cdot \bar{x} (2\pi) \\ V_s = \frac{\pi}{2} \cdot 5(2\pi) \\ V_c = 5\pi^2 \end{array} \right. & \left\{ \begin{array}{l} V_a = 10\pi^2 \cdot 5\pi^2 \\ V_d = 17\pi^2 \end{array} \right. \\ V &= \pi \end{aligned}$$