data • •

S T Q Q S S D

Tarefa básica

1) Letra C - Figura tridimensional, dos corpos redondos.

2) $V_1 = (4/3) \cdot \pi \cdot R^3$

$V_1 = (4/3) \cdot \pi \cdot 1^3$

$V_1 = 4/3\pi$

$V_2 = (4/3) \cdot \pi \cdot R^3$

$(4/3) \cdot \pi \cdot R^3 = 1000000 \cdot (4/3) \cdot \pi$

$R^3 = 1000000 = 10^6$

$R = \sqrt[3]{10^6} = 10^2$

$R = 100$

3) $V_e = (4/3) \cdot \pi \cdot R^3$

$V_c = \pi \cdot 16 \cdot R^3$

$R_c = 2R$

$R_e = R$

letra e

razão:

$$\frac{\frac{4\pi R^3}{3}}{\pi \cdot 16R^3} = \frac{4}{3} \cdot \frac{1}{16} = \frac{4}{48} = \frac{1}{12}$$

4) $\frac{4\pi \cdot 1^3}{3} + \frac{4\pi \cdot 2^3}{3} = \pi \cdot R^2 \cdot 3$

$\frac{4\pi}{3} + \frac{32\pi}{3} = 3R^2 \cdot \pi$

$\frac{36\pi}{3} = 3 \cdot R^2 \pi$

$12\pi = 3R^2\pi$

$R^2 = 12/3 = \sqrt{4} = 2cm$

letra B

data

5) $V_c = \pi . 6^2 . 1$

$V_c = 36\pi$

$V_e = (4/3) \pi . R^3$

$\frac{4\pi R^3}{3} = 36\pi$

$4\pi . R^3 = 108\pi$

$4\pi . R^3 = 108\pi \ (:4)$

$R^3 = 27$

$R = \sqrt[3]{27} = 3cm$

letra C

6) $V = 288\pi cm^3$

$\frac{288\pi = 4.\pi . R^3}{3}$

$R = \sqrt[3]{216} = 6$

$a = 2.6$

$a = 12$

letra E