(1) * GEOMETRIA PLANA

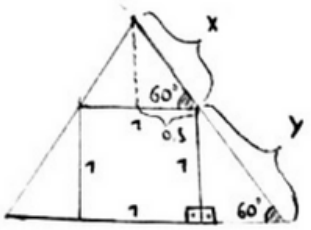
$A_c = A_q$

$\pi R^2 = L^2$

$R^2 = \frac{L^2}{\pi}$

$R = \frac{L}{\sqrt{\pi}}$ (A)

(2) * GEOMETRIA PLANA



$\cos 60° = \frac{0,5}{x}$

$\frac{1}{2} = \frac{0,5}{x}$

$x = 1\,m$

$\sin 60° = \frac{1}{y}$

$\frac{\sqrt{3}}{2} = \frac{1}{y}$

$y = \frac{2}{1,7}$

$y = 1,17\,m$

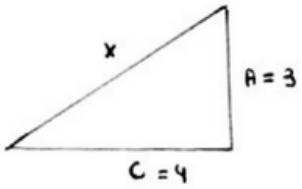
$L = x + y$

$L = 1 + 1,17$

$L = 2,17\,m$

(B)

(3) * GEOMETRIA PLANA



$x^2 = 3^2 + 4^2$

$x^2 = 25$

$x = 5$

$\frac{5}{4} = \frac{20}{y}$

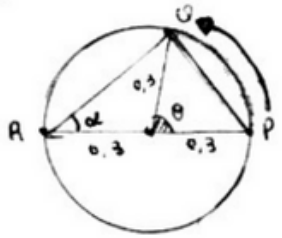
$y = 16$ polegadas

2,54 cm — 1 polegada

z — 16

$z = 40,64\,cm$ (D)

(4) * Geometria plana



$\theta = 2 \cdot \alpha$

$\theta = 2 \cdot \frac{\pi}{5}$

pθ

$L = \theta \cdot R$

$L = \frac{2\pi}{5} \cdot 0,3$

$L = 0,12\pi$ (D)

(5) (E)

(6) $R = 10\,m$

$D_q = 2R$

$L\sqrt{2} = 2R$

$L\sqrt{2} = 2 \cdot 10$

$L = 10\sqrt{2}\,m$

$A = A_c - A_q$

$A = \pi \cdot r^2 - L^2$

$A = 3 \cdot 10^2 - (10\sqrt{2})^2$

$A = 300 - 200$

$A = 100\,m^2$

15 Kg — $1\,m^2$

1 saco — $1\,m^2$

1 saco — $1\,m^2$

x — $100\,m^2$

$x = 100$ sacos (A)

PAI(F): $A_2 > A_1$

MÃE(F): A_1 não satisfaz, pois a $A \geq 400\ m^2$

FILHO1(V) $A_1 < 400\ m^2$ ✗
$A_2 > 400\ m^2$ ✓ ✓ (C)

OBS: Não precisa perder tempo analisando as outras alternativas, pois já encontramos a resposta!

(7) $\sin 60° = \frac{h}{15}$

$\frac{\sqrt{3}}{2} = \frac{h}{15}$

$\frac{1,7}{2} = \frac{h}{15}$

$h = 12,75\ m$ → 100 000 R$

$A_1 = 30 \cdot 12,75 \rightarrow A_1 = 382,5\ m^2$

$A_2 = 30 \cdot 15 \Rightarrow A_2 = 450\ m^2$ → 150 000 R$

(8) $A_{FATIA} = \frac{\pi \cdot 15^2}{8}$

$A_{FATIA} = \frac{\pi \cdot r^2}{10}$

$\frac{\pi \cdot 15^2}{8} = \frac{\pi \cdot r^2}{10}$

$r^2 = \frac{15^2 \cdot 10}{8}$

$\pi^2 = \frac{15^2 \cdot 5}{4}$

$\pi = \sqrt{\frac{15^2 \cdot 5}{4}}$

$\pi = \frac{15}{2}\sqrt{5}$

$\pi = \frac{15 \cdot 2,2}{2}$ → $\pi = 16,5\ cm$ (B)

(9) $H = 15 - 8$

$H = 7\ cm$

$V = a \times b \times H$

$V = 3 \cdot 4 \cdot 7$

$V = 84\ cm^3$

1 Bola — $6\ cm^3$

x — $84\ cm^3$

$x = 14$ bolas (A)

(10)

A	B
↓	↓
V_A	V_B
R	x
H	$0,25H = \frac{H}{4}$

$V_A = V_B$

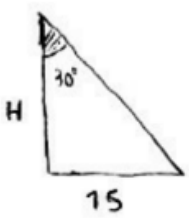
$\pi \cdot R^2 \cdot H = \pi \cdot x^2 \cdot \frac{H}{4}$

$R^2 = \frac{x^2}{4}$

$x^2 = R^2 4$

$x = 2R$ (B)

(11)



$\operatorname{tg} 30° = \frac{15}{H}$

$\frac{\sqrt{3}}{3} = \frac{15}{H}$

$\frac{1,7}{3} = \frac{15}{H}$ → $H \cong 26\ cm$ (C)

(13) $V_1 = 7,6 \cdot V_2$

$\pi \cdot r^2 \cdot h = 7,6 \cdot \pi \cdot r^2 \cdot x$

$6^2 \cdot 4 = 7,6 \cdot 3^2 \cdot x$

$36 \cdot 4 = 7,6 \cdot 9 \cdot x$

$\frac{36 \cdot 4}{9} = 7,6 \cdot x$

$4 \cdot 4 = 7,6 \cdot x$

$16 = 7,6 \cdot x$

$x = 10\ cm$ (B)

(14) $V = \frac{4}{3} \pi \cdot R^3$

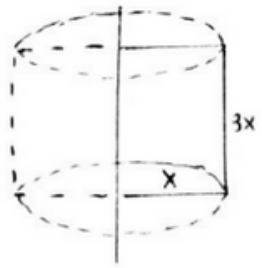
$36\pi = \frac{4}{3} \pi \cdot R^3$

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

$R^3 = 27$

$R = 3\ cm$ (B)

(15)



$375\pi = \pi \cdot x^2 \cdot 3x$

$125 = x^3$

$x = 5$

$\frac{A}{P} = \frac{3x^2}{8x} = \frac{3x}{8} = \frac{3 \cdot 5}{8} = \frac{15}{8}$ (E)