

1-

Área da Sala: 36m^2 Área de 1 peça: x^2

$\square x$
 x

a) ÁREA de cada peça

$$400x^2 = 36$$

$$x^2 = \frac{36}{400} \Rightarrow x^2 = \frac{9}{100} \Rightarrow x = \frac{3}{10} = 0,3\text{m}$$

b) Perímetro

$$x^2 = \frac{9}{100} \Rightarrow x = \sqrt{\frac{9}{100}} \Rightarrow x = \frac{\sqrt{9}}{\sqrt{100}}$$

$$x = \frac{3}{10} \quad P = 4 \cdot \frac{3}{10} \Rightarrow 1,2\text{m}$$

2-

$$\square x \rightarrow \square y$$

$$2 \cdot A_{\square x} = A_{\square y}$$

$$2 \cdot x^2 = y^2$$

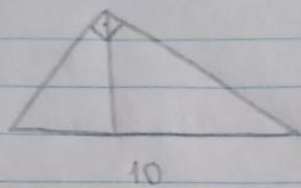
$$y = \sqrt{2 \cdot x^2}$$

$$y = \sqrt{2} \cdot \sqrt{x^2}$$

$$y = \sqrt{2} \cdot x$$

LETRA(D)

3-



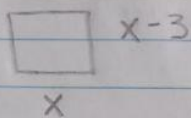
$$A = \frac{b \cdot h}{2} \Rightarrow 15 = \frac{10 \cdot h}{2}$$

$$15 = 5h$$

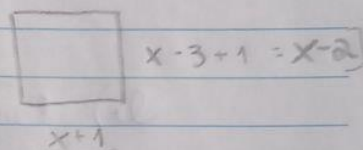
$$h = 3 //$$

(a) LETRA (D)

4-



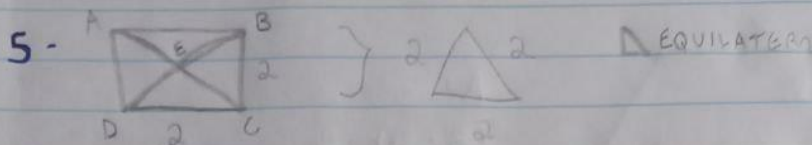
$$\text{Area } \square_{x-3} = x \cdot (x-3)$$



$$A = (x \cdot (x-3)) + 16$$

$$\begin{aligned} A_{\square_{x-2}} &= (x-2) \cdot (x+1) \\ (9-2) \cdot (9+1) \\ 7 \cdot 10 &= 70 \\ 70 \text{ m}^2 // \end{aligned}$$

$$\begin{aligned} (x+1) \cdot (x-2) &= (x \cdot (x-3)) + 16 \\ x^2 - 2x + x - 2 &= x^2 - 3x + 16 \\ x^2 - x^2 - x + 3x &= 16 + 2 \\ 2x &= 18 \\ x &= 9 \text{ m} // \end{aligned}$$



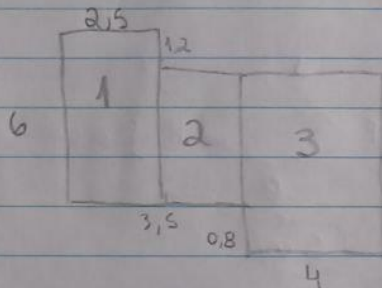
Circun. \Rightarrow RAIO = 2

\overline{DE} , \overline{CE} , \overline{CD} são raios dos arcos

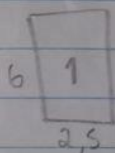
$$A \Delta \Rightarrow \frac{2^2 \cdot \sqrt{3}}{4} \Rightarrow A \Delta = \sqrt{3} //$$

LETRA (B)

6 -

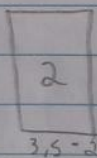


$$A = A_1 + A_2 + A_3$$



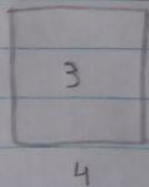
$$A_1 = 6 \cdot 2,5$$

$$A_1 = 15$$



$$6 - 1,2 = 4,8 \quad A_2 = 4,8 \cdot 1 = 4,8 //$$

$$3,5 - 2,5 = 1$$



$$4,8 + 0,8 = 5,6$$

$$A_3 = 4 \cdot 5,6$$

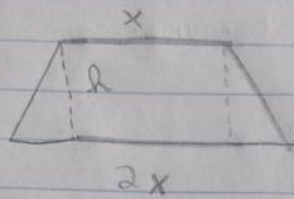
$$A_3 = 22,4$$

$$A = A_1 + A_2 + A_3$$

$$15 + 4,8 + 22,4 = 42,2 \text{ m}^2 //$$

LETRA (E)

7



$$A = 36 \text{ cm}^2$$

$$\frac{(B+b) \cdot h}{2} = 36$$

$$\frac{(2x+x) \cdot h}{2} = 36$$

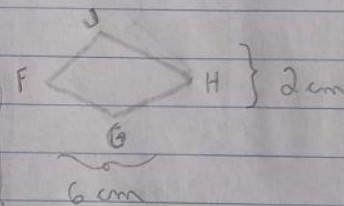
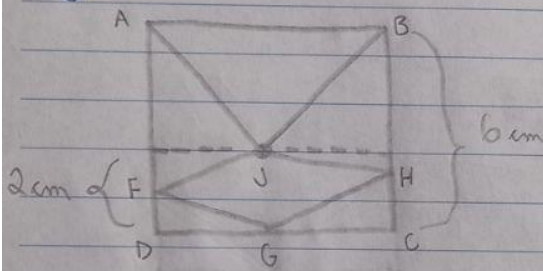
$$3x \cdot h = 72$$

$$\text{Area } \square = b \cdot h \Rightarrow$$

$$x \cdot h = \frac{72}{3} \Rightarrow 24 \text{ cm}^2$$

LETRA (E)

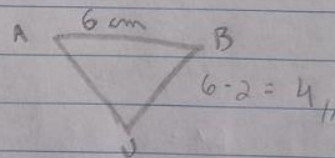
8-

Razão $FGHJ$ e ABJ

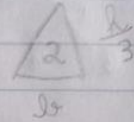
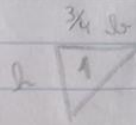
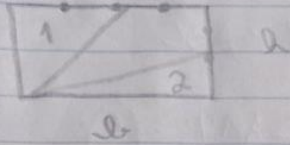
$$\frac{D \cdot d}{2} : \frac{b \cdot h}{2}$$

$$\frac{6 \cdot 2}{2} : \frac{6 \cdot 4}{2} \Rightarrow 6 : 12 \Rightarrow \frac{6 : 6}{12 : 6} \Rightarrow \frac{1}{2}$$

LETRA (D)



9-



$$A_{\square} = 48$$

$$l \cdot h = 48$$

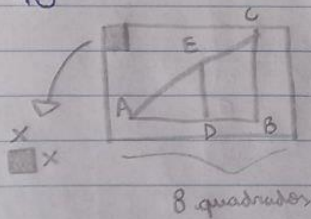
$$A_Q = A_{\square} - A_{\triangle 1} - A_{\triangle 2}$$

$$A_Q = 48 - \frac{3}{4} l \cdot \frac{h}{2} - l \cdot \frac{h}{2} \cdot \frac{1}{2}$$

$$A_Q = 48 - \frac{3}{8} \cdot 48 - 48 \cdot \frac{1}{6}$$

$$A_Q = 48 - 18 - 8 \Rightarrow 22 // \text{ LETRA (E)}$$

10-



$$ADE \sim ABC$$

$$\left(\frac{AD}{AB}\right)^2 = \frac{\text{Area } \triangle ADE}{\text{Area } \triangle ABC}$$

$$\frac{\sqrt{2} \cdot 2^2}{4\sqrt{2}}$$

$$\begin{array}{r} 32 \overline{) 2^2} \\ 16 \\ \underline{16} \\ 8 \\ \underline{8} \\ 4 \\ \underline{4} \\ 2 \\ \underline{2} \\ 1 \end{array}$$

$$\left(\frac{AD}{8}\right)^2 = \frac{1/2 \cdot \text{Area } \triangle ABC}{\text{Area } \triangle ABC}$$

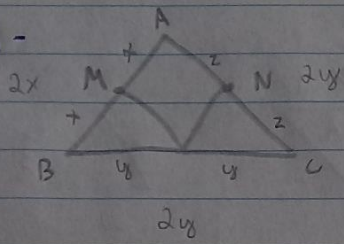
$$\frac{AD^2}{64} \times \frac{1}{2} \Rightarrow 2AD^2 = 64$$

$$AD^2 = 32$$

$$AD = \sqrt{32} \Rightarrow 4\sqrt{2} //$$

LETRA (A) FORONI

11 -



$$AMN \sim ABC$$

$$\frac{A_{\Delta AMN}}{A_{\Delta ABC}} = \left(\frac{1}{2}\right)^2$$

$$A_{\Delta ABC} = 96 \text{ m}^2$$

$$A_{\Delta AMN} = \frac{1}{4} \cdot A_{\Delta ABC}$$

$$A_{\Delta AMN} = \frac{96}{4} \Rightarrow 24 \text{ m}^2$$

$$A_{\Delta (BMNC)} = 96 - 24 \Rightarrow 72 \text{ m}^2 //$$