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Turma: CTII 348

Prontuário: CB1990209

Disciplina: Matemática

IFSP - Câmpus Cubatão

Tarefa Básica 02

Área do Círculo

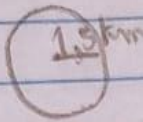
(Fotos nas páginas seguintes)

Exercícios 1, 2, 3 e 4:

Matéria 2 - Área do círculo

Exercício Básico

1-)



$$\begin{aligned} 2p &= 2\pi r \\ 2p &= 2 \cdot 3,14 \cdot 1,5 \\ 2p &= 6,28 \cdot 1,5 \\ 2p &= 9,42 \text{ km} \end{aligned} \quad \begin{aligned} 1L &= 6 \text{ km} \\ 120L &= x \text{ km} \\ x &= 120 \cdot 6 \\ x &= 720 \text{ km} \end{aligned}$$

720

9,42

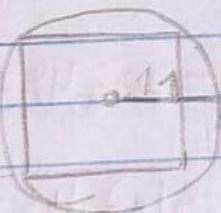
$$720 : 9,42 = 76,43 \approx 76 \rightarrow \text{Letra C.}$$

2-)



$$\begin{aligned} 2p &= 2\pi r \cdot 10 \\ 2p &= 2\pi \cdot 2 \cdot 10 \\ 2p &= 40\pi \text{ m} \rightarrow \text{Letra C.} \end{aligned}$$

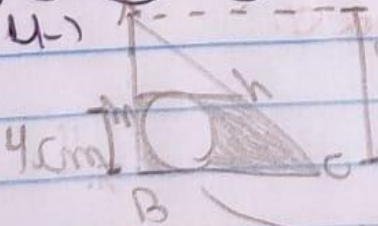
3-)



$$\begin{aligned} S_0 &= \pi r^2 \\ S_0 &= \frac{d^2}{2} \Rightarrow \frac{(20)^2}{2} \end{aligned}$$

$$\begin{aligned} \pi r^2 - \frac{(20)^2}{2} &\Rightarrow \pi r^2 - 400 \Rightarrow \pi r^2 - 200 \\ x &= 40\pi - 200 \text{ m} \rightarrow \text{Letra D.} \end{aligned}$$

4-)



$$S_{\text{tri}ABC} = \frac{(8+4) \cdot 4}{2}$$

$$S_{\text{tri}ABC} = \frac{12 \cdot 4}{2} = 24 \text{ cm}^2$$

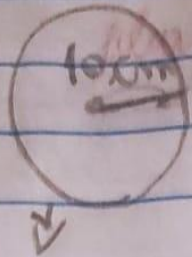
$$\begin{aligned} S_0 &= \pi r^2 \\ S_0 &= 3,14 \cdot 2^2 \\ S_0 &= 12,56 \text{ cm}^2 \end{aligned}$$

Região

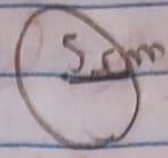
$$\begin{aligned} \text{Requerida} &= 24 - 12,56 \\ &= 11,44 \text{ cm}^2 \rightarrow \text{Letra A} \end{aligned}$$

Exercícios 5, 6 e 7:

5-) C1



C2



$$\frac{100}{1} = 10.5 \text{ mm}$$

Subtra C.

$$S_{C1} = \pi \cdot 10^2$$

$$S_{C1} = 100\pi$$

$$2p = 2\pi \cdot 5.5$$

$$2p = 10\pi$$

6-) $1 \text{ cm}^2 = 10 \text{ mm}^2$

superfície

$$\frac{10}{0.02 \cdot 10^{-3}} = 500000 \rightarrow 5 \cdot 10^5$$

gotas por
quilômetro.

diâmetro $d = 0.02 \cdot 10^{-3}$
m

$$5 \cdot 10^5 \cdot 5 \cdot 10^5 = 25 \cdot 10^{10} \text{ m}$$

Subtra C

7-) $40 \cdot 15 = 600 \text{ m}^2$

$$144 + 50.24 + 12.25 = 206.49$$

$$C_{C2} = \frac{24 \cdot 12}{2} = 144 \text{ m}^2$$

$$600 - 206.49 = 393.51$$

$$P_{C2} = 3.14 \cdot 4^2 = 50.24 \text{ m}^2$$

$$393.51 \cdot 2.40 = \therefore$$

$$V_{C2} = 3.5^2 = 12.25 \text{ m}^2$$

$$\therefore = 1944.40$$

Subtra C.