

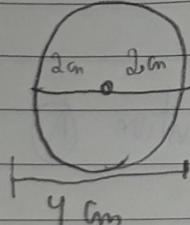
Lista de Exercícios - Aula 29

Lista de Exercícios (C)

$\text{1} - C = 2 \cdot \pi \cdot R$	6 km/L (320 litros)	$n^{\circ} \text{ voltas} = ?$
$\pi = 3,14$	\checkmark	\checkmark
$R = 1,5 \text{ km}$	$120 \cdot 6 = 720 \text{ km}$	\checkmark

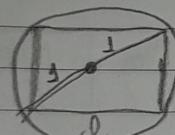
$\text{2} - C = 2 \cdot \pi \cdot 1,5$	$\left\{ \begin{array}{l} 1 \text{ volta} = 9,42 \text{ km} \\ n \text{ voltas} = 720 \text{ km} \end{array} \right.$	$\left\{ \begin{array}{l} n = \frac{940}{9,42} = 100,43 \\ n \approx 76 \text{ voltas} \end{array} \right. \quad \text{Alternativa C}$
$C = 3 \pi$	\checkmark	\checkmark
$C = 3 \cdot 3,14$	\checkmark	\checkmark
$C = 9,42$	$9,42 \cdot n = 720$	\checkmark

2 -



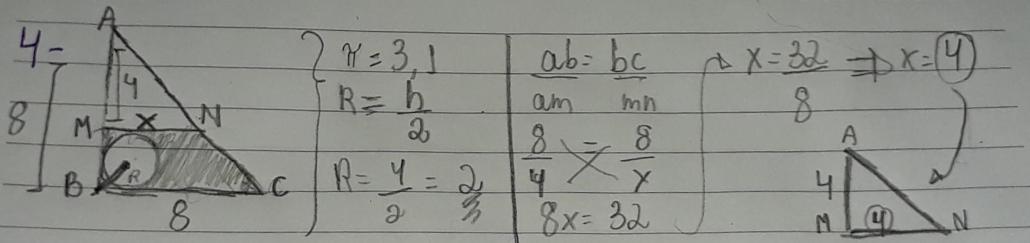
$$\left\{ \begin{array}{l} 1 \text{ volta} = 2\pi R \\ 1 \text{ volta} = 2\pi \cdot 2 \\ 1 \text{ volta} = 4\pi \\ 10 \text{ voltas} = 10 \cdot 4\pi \\ 10 \text{ voltas} = 40\pi \end{array} \right. \quad \text{Alternativa C}$$

3 -



$$\left\{ \begin{array}{l} \text{Diagonal do quadrado} = (\sqrt{2})l \\ d = l\sqrt{2} \\ l = \frac{d}{\sqrt{2}} \cdot \frac{\sqrt{2}}{\sqrt{2}} \\ l = \frac{d\sqrt{2}}{2} \rightarrow l = \frac{d}{\sqrt{2}} \end{array} \right. \quad \text{Alternativa D}$$

$$\begin{aligned} A_{\text{região}} &= A_{\theta} - A_{\square} \\ A_{\text{região}} &= \pi \cdot r^2 - (\sqrt{2})^2 \\ A_{\text{região}} &= \pi r^2 - 2 \end{aligned}$$



$AmnCAB = \frac{(B+b) \cdot h}{2}$	$\left\{ \begin{array}{l} Ac = \pi \cdot r^2 \\ Ac = 3,14 \cdot 4^2 \\ Ac = 3,14 \cdot 4 \\ Ac = 12,56 \text{ cm}^2 \end{array} \right.$	$AmnCAB = \frac{(B+b) \cdot h}{2}$
$AmnCB = \frac{(8+4) \cdot 4}{2}$	$\left\{ \begin{array}{l} Ac = \pi \cdot r^2 \\ Ac = 3,14 \cdot 4^2 \\ Ac = 3,14 \cdot 4 \\ Ac = 12,56 \text{ cm}^2 \end{array} \right.$	$Ac = 24 - 12,56$
$AmnCB = \frac{12 \cdot 4}{2}$	$\left\{ \begin{array}{l} Ac = \pi \cdot r^2 \\ Ac = 3,14 \cdot 4^2 \\ Ac = 3,14 \cdot 4 \\ Ac = 12,56 \text{ cm}^2 \end{array} \right.$	$Ac = 11,44 \text{ cm}^2$
$AmnCAB = 24 \text{ cm}^2$		Área hachurada = 11,44 cm ²
$AmnCB = 11,44 \text{ cm}^2$		Alternativa A

5- $C_1 \rightarrow R_1 = 10 \text{ cm}$

$C_2 \rightarrow R_2 = 5 \text{ cm}$

$\left\{ \begin{array}{l} \frac{Ac_1}{Perímetro C_2} \Rightarrow ?? \\ \frac{Ac_1}{P_{C_2}} = \frac{\pi \cdot 10^2}{2 \cdot \pi \cdot 5} = \frac{100}{2 \cdot 5} = \frac{10}{1} = 10 \text{ cm} \end{array} \right.$

Alternativa C

6- Diâmetro vírus = $0,02 \cdot 10^{-3} \text{ mm}$

Área da colónia = 1 cm^2

$D. vírus = 0,02 \cdot 10^{-3} \cdot 10^{-3} \text{ cm}$

$D. vírus = 0,02 \cdot 10^{-6} \text{ cm}$

$D. vírus = 2 \cdot 10^{-2} \cdot 10^{-6} \rightarrow 2 \cdot 10^{-6} \text{ cm}$

* Qualos vírus cabem em uma fileira de 1 cm? $\frac{1}{2 \cdot 10^{-6}} = 0,5 \cdot 10^6 = 5 \cdot 10^5 \cdot 10^6 = 5 \cdot 10^{11}$

* Fileiras verticais e horizontais $(5 \cdot 10^5) \cdot (5 \cdot 10^5)$

$(25 \cdot 10^{10})$ Alternativa C

$$7 - A_{grama} = A_{terreno} - A_{casa} - A_{piscina} - A_{restâncio}$$

$$A_g = A \square_{40m} - A \triangle_{34m} = A \odot_{4} - A \square_{3,5m}$$

$$A_g = 35 \cdot 40 - \frac{12 \cdot 12}{2} = 11 \cdot 4^2 - 3,5 \cdot 3,5$$

$$A_g = 600 - 144 - 3,5 \cdot 16 - 12,25$$

$$A_g = 456 - 50,24 - 12,25$$

$$A_g = 405,76 - 12,25$$

$$A_g = 393,51 \text{ m}^2$$

m^2	R\$	$Px = 393,51 \cdot 2,4$
1	2,46	
393,51	X	$x = \text{R\$ 944,40}$

Alternativa C