

$$1- C = 2 \cdot \pi \cdot R$$

$$R = 1,5 \text{ Km}$$

$$6 \text{ Km per litro} \Rightarrow 120 \text{ Litros} \cdot 6 = 720 \text{ Km}$$

$$C = 2 \cdot \pi \cdot 1,5$$

$$C = 3 \cdot \pi$$

$$C = 3 \cdot 3,14 \Rightarrow 9,4$$

$$m = \frac{720}{9,4} \approx 76 //$$

LETRA (C)

$$2- 10 \text{ voltas} \quad d = 4 \text{ cm} \Rightarrow R = 2 \text{ cm} \quad 10 \text{ voltas}$$

$$C = 2 \cdot \pi \cdot 2 \Rightarrow C = 4\pi \Rightarrow C = 4\pi \cdot 10$$

$$C = 40\pi //$$

LETRA (C)

3-



$$A_T = A_0 - A_{\square}$$

$$A_0 = \pi \cdot r^2$$

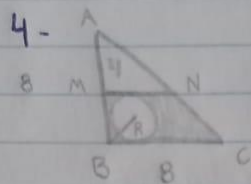
$$A_{\square} = l^2 \Rightarrow l^2 = 1^2 + 1^2 \Rightarrow l = \sqrt{2}$$

$$r = 1$$

$$A_T = \pi \cdot (1)^2 - (\sqrt{2})^2$$

$$A_T = \pi - 2 //$$

LETRA (D)

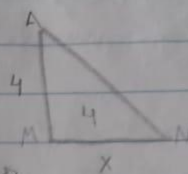


$$\frac{ab}{am} = \frac{bc}{cm} \Rightarrow \frac{8}{4} = \frac{8}{x}$$

$$8x = 32$$

$$x = \frac{32}{8}$$

$$x = 4$$



$$\pi = 3,1$$

$$n = \frac{h}{2} \Rightarrow \frac{4}{2} = 2$$

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

$$AMNBC = \frac{(8+4) \cdot 4}{2}$$

$$AMNBC = 24 \text{ cm}^2$$

$$A_c = \pi \cdot r^2$$

$$A_c = 3,1 \cdot 2^2$$

$$A_c = 12,4 \text{ cm}^2$$

$$A = 24 - 12,4$$

$$A = 11,6 \text{ cm}^2$$

LETRA (A)

5-

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

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

$$A_{c1} = \pi \cdot R^2$$

$$C_{c2} = 2 \cdot \pi \cdot R$$

$$A_{c1} = \pi \cdot 10^2$$

$$A_{c1} = 100\pi$$

$$C_{c2} = 2 \cdot \pi \cdot 5$$

$$C_{c2} = 10\pi$$

$$\frac{100\pi}{10\pi} \rightarrow 10 \text{ cm}$$

LETRA (C)

6 -

$$\text{diámetro} = 0,02 \cdot 10^{-3} \text{ mm}$$

$$A = 1 \text{ cm}^2$$

$$D = 0,02 \cdot 10^{-3} \cdot 10^{-4}$$

$$D = 0,02 \cdot 10^{-4}$$

$$D = 2 \cdot 10^{-2} \cdot 10^{-4} = 2 \cdot 10^{-6} \text{ cm}$$

$$\text{Virus por fila: } \frac{1}{2 \cdot 10^{-6}} = 0,5 \cdot 10^6 = 5 \cdot 10^{-4} \cdot 10^6 = 5 \cdot 10^5 //$$

$$\text{Filas HORIZONTAL e VERTICAL: } (5 \cdot 10^5) \cdot (5 \cdot 10^5) = 25 \cdot 10^{10} //$$

LETRA (C)

7 -

$$A_G = A_T - A_C - A_P - A_V$$

$$A_G = 15 \cdot 40 - \frac{12 \cdot 24}{2} - \pi \cdot 4^2 - 3,5 \cdot 3,5$$

$$A_G = 600 - 144 - 3,14 \cdot 16 - 12,25$$

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

$$\begin{array}{r} 1 \text{ --- } 2,40 \\ 393,51 \text{ --- } X \end{array}$$

$$X = 944,40 //$$

LETRA (C)