S T Q Q S S D

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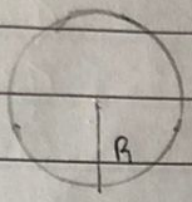
Tarefa

1-



- $R = 1,5\ km$; $\pi = 3,14$

$2p = CO$

$CO = 2\pi R$

$CO = 2 \cdot 3,14 \cdot 1,5$

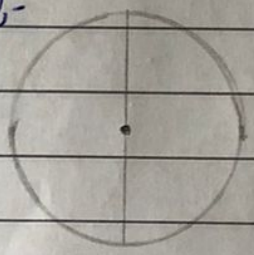
$CO = 9,42$ tamanho da pista

- O carro tem 120L de gasolina, a cada 6km gasta 1L, então km que o carro percorreu : $6 \cdot 120 = 720\ km$

qtd de voltas $= \frac{720}{9,42} =$ **76,43**

C

2-



$2p = CO$

$CO = 2\pi r$

$CO = 2\pi 2$

$CO = 4\pi$

- diametro $= 2r = 4\ cm$
- $r = 20\ m$
- o carro deu 10 voltas, então o carro percorreu:

$10 \cdot 4\pi =$ **40π**

C

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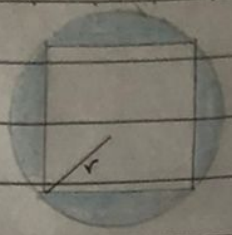
S T Q Q S S D

3-



$r = 1$

$d = r \cdot 2$

$d = 1 \cdot 2$

$d = 2$

$A_{ext} = A_c - A_q$

$A_c = \pi . R^2$

$A_c = \pi . 1^2$

$A = \pi$

$d = l\sqrt{2}$

$2 = l\sqrt{2}$

$l = \frac{\sqrt{2} \cdot \sqrt{2}}{\sqrt{2}\ \sqrt{2}}$

$l = \frac{2\sqrt{2}}{2}$

$l = \sqrt{2}$

$A_q = l^2$

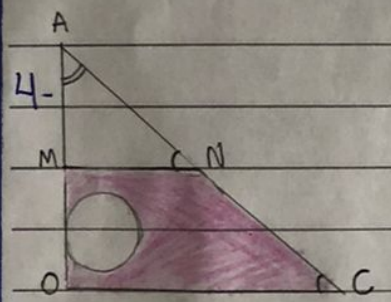
$A_q = (\sqrt{2})^2$

$A_q = 2$

$A_{ext} = A_c - A_q$

$A_{ext} = \pi - 2$

i)



4-

$\pi = 3,1$

$B = BC = 8$

$b = MN = 4$

$r = MN/2 = 4/2 = 2$

$\frac{AB}{AM} = \frac{BC}{MN} \Rightarrow \frac{8}{4} = \frac{8}{MN}$

$MN\ 8 = 8.4$

$MN = \frac{8.4}{8}$

$MN = 4$

$A_{trap} = \frac{(B.b).h}{2}$

$\frac{(8+4)^6.4}{2} \Rightarrow (12).2$

$A_{trap} = 24\,cm^2$

$A_c = \pi . r^2$

$A_c = 3,1 . 2^2$

$A_c = 3,1 . 4$

$AC = 12,4$

A

$A_{hAC} = A_{trap} - A_c$

$A_{hAC} = 24 - 12,4$

$A_{hAC} = 11,6$

S T Q Q S S D

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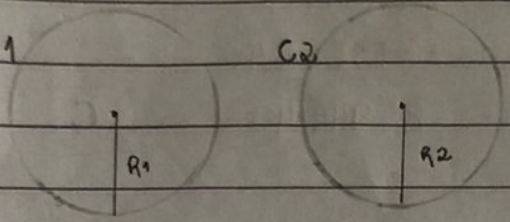
5-



$R_1 = 10\,cm$

$R_2 = 5\,cm$

Razão entre a área do c1 e o perímetro do c2

$A_{C1} = \pi . R^2$	$C_0 = 2\pi . R_2$	$R = \frac{A_{C1}}{C_{02}}$
$A_{C1} = \pi . 10^2$	$C_0 = 2\pi . 5$	
$A_{C1} = 100\pi$	$C_0 = 10\pi$	$R = \frac{100\pi}{10\pi} = R = 10\,cm$

C

6-

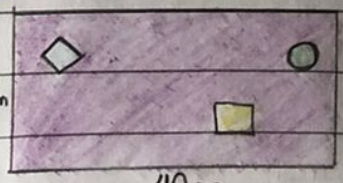
- diâmetro $= 0{,}02 . 10^{-3}$
- area da superfície $= 1\,cm^2 = 10\,mm$

$\frac{10}{0{,}02 . 10^{-3}} = 500000 \Rightarrow 5 . 10^5$ (vírus por fileiras)

C

$5 . 10^5 . 5 . 10^5 = 25 . 10^{10}$

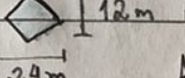
7-



$A_r = b . h$

$A_r = 40 . 15$

$A_r = 600\,m^2$



$A_l = D . d / 2$

$A_l = 24 . 12 / 2$

$A_l = 12 . 12$

$A_l = 144\,m^2$

$A_q = l^2$

$A_q = 3{,}5^2$

$A_q = 12{,}25$

$A_c = \pi . R^2$

$A_c = 3{,}14 . 4^2$

$A_c = 3{,}14 . 16$

$A_c = 50{,}25\,m^2$

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S T Q Q S S

$A_{gram} = A_r - (A_l + A_c + A_q)$

$A_{gram} = 600 - (144 + 50{,}25 + 12{,}5)$

$A_{gram} = 600 - 206{,}5$

$A_{gram} = 393{,}5\ m^2$

$Q_{gasta} = A_{gram} \cdot 2{,}40$

$Q_{gasta} = 393{,}5 \cdot 2{,}40$

$Q_{gasta} = R\$\ 944{,}40$

C