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# Tarefa Básica - Área de Quadriláteros e Triângulos

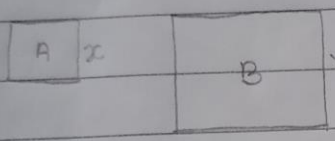
01. a) $S = \frac{36}{400} = 0,09\ m^2$

b) $b = h \quad S = b.b = 0,09 \quad P = 4.0,3 = 1,2\ m$

$b^2 = 0,09$

$b = \sqrt{0,09}$

$b = 0,3m$

02. 

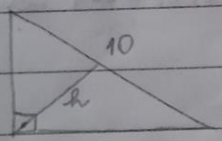

$S_A = x^2$

$S_B = S_A . 2 = y^2$

$2x^2 = y^2$

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

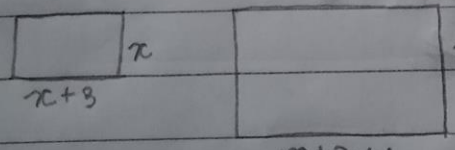
$y = \sqrt{2}.x$ Letra b

03. 


$S = \frac{b.h}{2} \Rightarrow 15 = \frac{10.h}{2}$

$30 = 10.h$

$h = 3$ letra b

04. 


$S_B = (x+1).(x+4)$

$S_B = x^2 + 5x + 4$

$S_B = S_A + 16$

$S_B = x.(x+3) + 16$

$x^2 + 5x + 4 = x^2 + 3x + 16$

$2x - 12 = 0$

$x = 12/2$

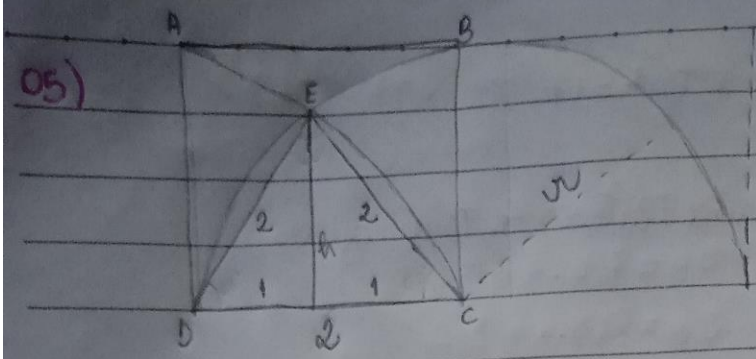
$x = 6$

$S_B = (6+1).(6+4)$

$S_B = 7.10$

$S_B = 70\ m^2$

05)




$2^2 = 1^2 + h^2$

$4 = 1 + h^2$

$h^2 = 3$

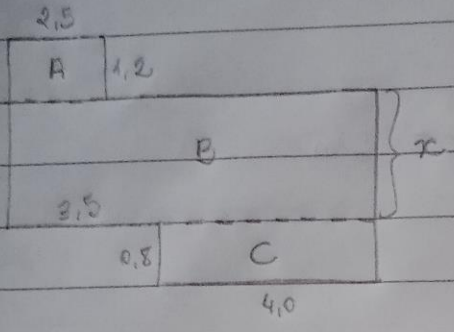
$h = \sqrt{3}$

$S_{DCE} = \frac{2 \cdot \sqrt{3}}{2}$

$S_{DCE} = \sqrt{3}$

letra B

06.




$x = 6 - 1,2 = 4,8$

$S_A = 2,5 \cdot 1,2 = 3$

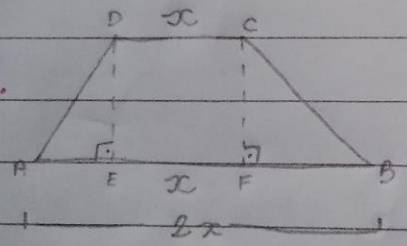
$S_B = 7,5 \cdot 4,8 = 36$

$S_C = 4 \cdot 0,8 = 3,2$

$S_T = S_A + S_B + S_C = 3 + 36 + 3,2 = 42,2$

letra E

07.




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

$72 = 3x \cdot h$

$h = \frac{72^{24}}{3x}$

$h = \frac{24}{x}$

$S_{CDEF} = b \cdot h$

$S_{CDEF} = x \cdot \frac{24}{x}$

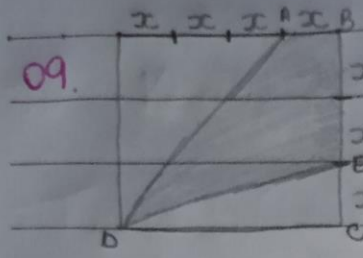
$S_{CDEF} = 24$ letra E

08. $S_{ABJ} = \frac{6 \cdot 4^2}{2} = 12$

$S_{FGHJ} = \frac{6 \cdot 2}{2} = 6$

$\frac{S_{FGHJ}}{S_{ABJ}} = \frac{6^1}{12^2} = \frac{1}{2}$ letra b

09.




$S_{RET} = 4x \cdot 3x$

$48 = 12x^2$

$x^2 = 4$

$x = \sqrt{4}$

$x = 2$

$S_{ABCD} = \frac{(x+4x).3x}{2}$

$S_{ABCD} = \frac{(2+4.2).3.2}{2}$

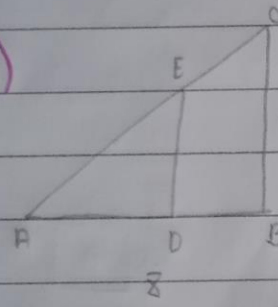
$S_{ABCD} = 30$

$S_{EDC} = \frac{4x \cdot x}{2} = \frac{4.2.2}{2} = 8$

$S_{ABED} = S_{ABCD} - S_{EDC}$

$S_{ABED} = 30 - 8 = 22$ letra E

10)




$\left(\frac{AD}{AB}\right)^2 = \frac{1}{2} \Rightarrow \frac{AD^2}{8^2} = \frac{1}{2}$

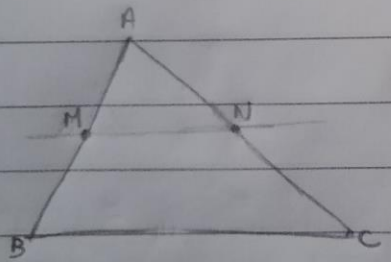
$2AD^2 = 64$

$AD^2 = 32$

$AD = \sqrt{32} = 4\sqrt{2}$ letra A

A razão de semelhança é 1:2

11.




A razão de semelhança é 1:2

$K = \left(\frac{1}{2}\right)^2 = \frac{1}{4}$

$\frac{S_{AMN}}{S_{ABC}} = \frac{1}{4}$

$\frac{x}{96} = \frac{1}{4}$

$4x = 96$

$x = 24$

$S_{BMNC} = 96 - 24 = 72 m^2$