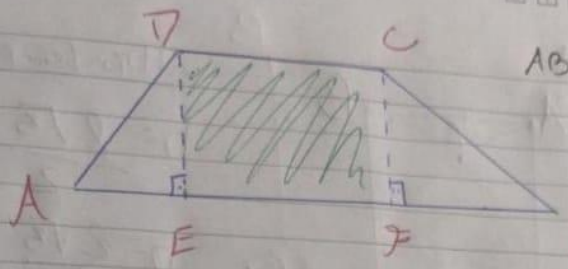
07-



$AB = 2CD$

Área trapézio

$A_{\text{trapézio}} = \frac{(B+b).h}{2}$

$36 = \frac{(2CD + CD).h}{2}$

$24 = CD.h$

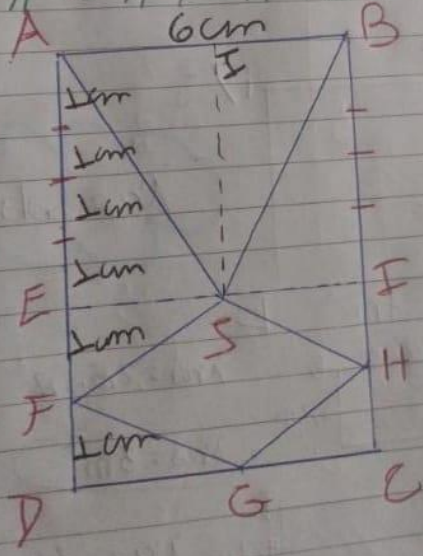
Área retângulo

$CD \cdot DE = \text{Área}$

$CD.h = \text{Área}$

Área CDEF = $24\ cm^2$

08-



Área FGHS

$\frac{D.d}{2}$

$\frac{FH.SG}{2}$

$\frac{6.2}{2} = 6\ cm^2$

Área FGHS = $6\ cm^2$

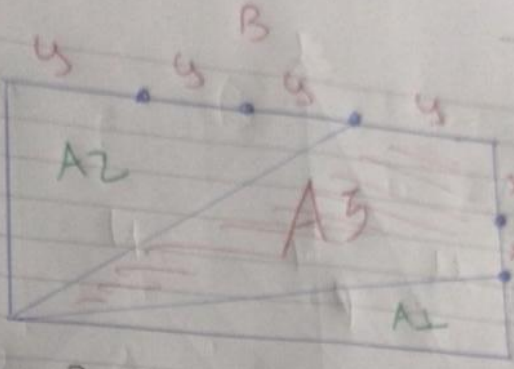
Área ABS

$A_{ABS} = \frac{B.h}{2}$

$\frac{AB.I}{2} = \frac{6.4}{2} = 12$

$\frac{\Delta FGHS}{\Delta ABS} = \frac{6}{12} = \frac{1}{2}$

09-



* Encontrar 2 números onde o B tem que ser maior que o a e dê 48.

$a = 6$ $\quad a = 3x \quad B = 4y$

$b = 8$ $\quad 6 = 3x \quad 8 = 4y$

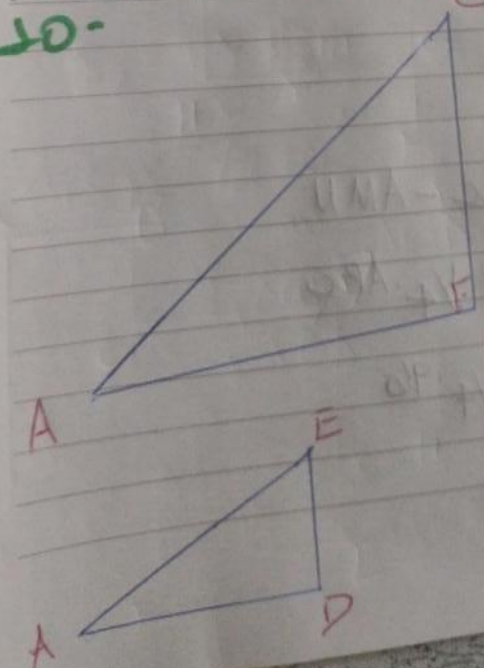
$x = 2 \quad y = 2$

Área

$A_1 = 8 \cdot 2$ $\quad$ Área $A_2 = 3y \cdot a/2$ $\quad A_3 = 48 - 18 - 8$

$A_1 = 16/2 = 8$ $\quad A_2 = 36/2 = 18$ $\quad A_3 = 22$

10-



$\triangle ABC \sim \triangle AED$

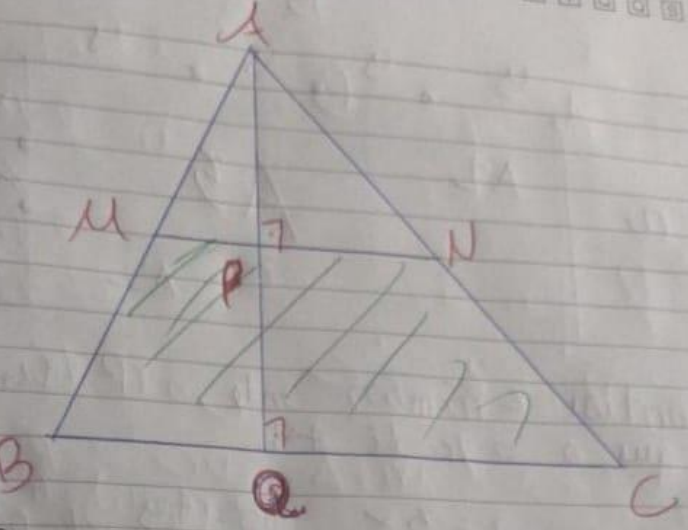
Propriedade $\left(\frac{A}{A}\right) = K^2$

$\frac{AD^2}{AB} = \frac{\text{Área } ADE}{\text{Área } ABC}$

$\frac{AD^2}{8^2} = \frac{1/2}{1}$

$2AD^2 = 64$ $\quad AD = 4\sqrt{2}$

11-



$M_N = \frac{1}{2} BC$

Por ser Ponto médio

$\triangle AMN \approx ABC = 1:2$

$\frac{\triangle MN}{\triangle ABC} = \left(\frac{1}{2}\right)^2 \Rightarrow \triangle AMN = \frac{1}{4} \cdot \triangle ABC$

$x = BMNC$

$\triangle BC = x + AMN \Rightarrow x = ABC - AMN$

$x = 96 - \frac{1}{4} \cdot ABC$

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

$x = 72m^2$

spiral