

INSTITUTO FEDERAL

São Paulo

Câmpus Cubatão

TAREFA BÁSICA 27: ÁREA DE QUIADRILÁTEROS E TRIÂNGULOS

Nome: André Luiz Gonçalves da Silva Teixeira

Exercício 1, 2 e 3:

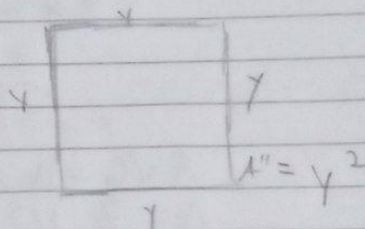
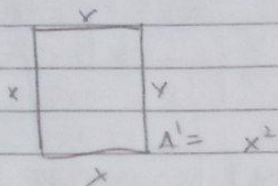
① a) $A = \frac{36}{400} = 0,09 \text{ m}^2$

b) $l^2 = 0,09$

$l = \sqrt{0,09}$

$l = 0,3 \text{ m}$

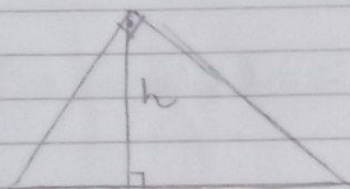
②



$A'' = 2A'$

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

③



$10h = 30$

$10h = 30$

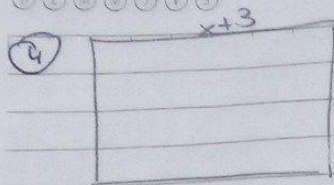
$h = 3$

$h = 3$

$h = 3$

$h = 3$

Exercício 4, 5 e 6:



$$x+3+1=x+4$$

$$x+1$$

$$x(x+3)+16 = (x+1)(x+4)$$

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

$$-5x+3x = 4-16$$

$$-2x = -12$$

$$x = 6$$

$$2$$

$$x = 6$$

$$A = (6+1) \cdot (6+4)$$

$$A = 7 \cdot 10$$

$$A = 70 \text{ m}^2$$

⑤ Arcos C e D = novo lado D

$$DE = CE = DC = 2 \rightarrow \Delta DCE = \text{lado } 2$$

$$A = \frac{2^2 \cdot \sqrt{3}}{4} = \frac{4\sqrt{3}}{4} = \sqrt{3}$$

⑥ $A = 2,5 \cdot 6$
 $A = 15 \text{ m}^2$

$$\left\{ \begin{array}{l} C = 4,8 + 0,8 = 5,6 \\ R = 4 \end{array} \right.$$

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

$$R = 3,5 - 1,5 = 2$$

$$A = 5,6 \cdot 4 = 22,4 \text{ m}^2$$

$$A = 4,8 \cdot 2 = 9,6 \text{ m}^2$$

$$A = 15 + 9,6 + 22,4 = 47,0 \text{ m}^2$$

Exercício 7 e 8:

③ $A_t = 36 \text{ cm}^2$

$AB = 2 \cdot CD$

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

$72 = 3CD \cdot CD$

$72 = 3CD^2$

$72 = 3CD^2$

$\sqrt{\frac{72}{3}} = CD$ $A = 4,9 \cdot 4,9$
 $4,9 \approx CD$ $A \approx 24 \text{ cm}^2$

①

$A_{\Delta FGH} = \frac{1}{4}$ da $A_{\Delta ABT}$ { base igual, porém
 altura de ΔFGH
 é $\frac{1}{2}$ da de ΔABT
 é $\frac{1}{4}$.

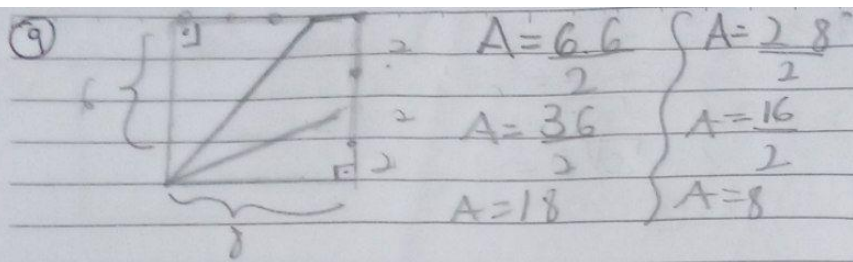
$A_{FGHT} = 2 A_{\Delta FGH}$

então A_{FGHT} é $\frac{2}{4}$ da

$A_{\Delta ABT}$.

então $A = \frac{2 \div 2}{4 \div 2} = \frac{1}{2}$

Exercício 9, 10 e 11:

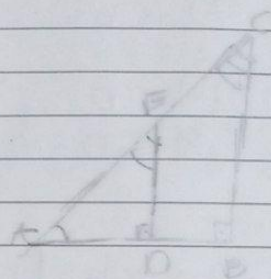


$$A_T = 48$$

$$48 - 26 = 22$$

⑩ $\triangle ADE \sim \triangle ABC$

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



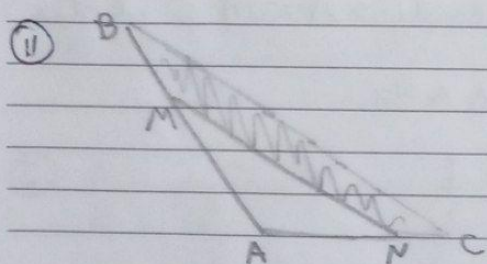
$$\frac{AD^2}{64} = \frac{1}{2}$$

$$2AD^2 = 64$$

$$AD^2 = 32$$

$$AD = \sqrt{32}$$

$$AD = 4\sqrt{2}$$



razão entre
 $\triangle ABC$ e $\triangle AMN = 2$

$$r = 2^2 = 4$$

$$\left. \begin{array}{l} 96 = 4 \\ S \end{array} \right\} 4S = 96$$

$$S = 24m^2$$

$$96 - 24 = 72m^2$$