Tarefa Básica

① a) $\frac{36}{400} = 0,09\ m^2$

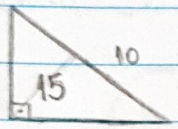
b) $\ell^2 = 0,09\ m^2$ $\quad P = 0,3 \cdot 4 = 1,2\ m$

$\ell = 0,3\ m$

② $A = x^2$ $\quad y^2 = 2x^2$

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

Alternativa (D)

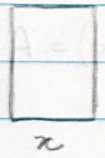
③ 

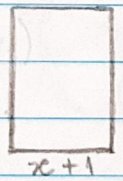
$15 = \frac{10 \cdot \ell}{2}$

$30 = 10\ell$

$\ell = 3$

Alternativa (D)

④ 



$A = x \cdot (x+3)$ $\quad A = (x+1)(x+4)$

$A = x^2 + 3x$ $\quad A = x^2 + 5x + 4$

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

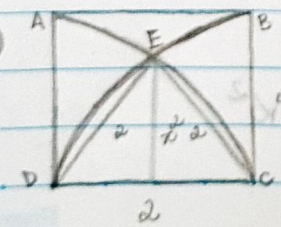
$2x = 12$

$x = 6$

$x + 1 = 7\ m$

$x + 4 = 10\ m$

$A = 7 \cdot 10 = 70\ m^2$

⑤ 

$2^2 = 1^2 + x^2$

$4 = 1 + x^2$

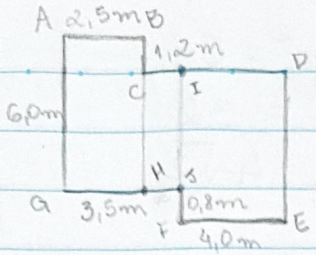
$x = \sqrt{3}$

$A = \frac{2\sqrt{3}}{2}$

$A = \sqrt{3}$

Alternativa (A)

⑥



$\overline{HJ} = 3,5 - 2,5 = 1m$

$\overline{CH} = 6 - 1,2 = 4,8m$

Alternativa (E)

$A_{ABHG} = 2,5 \cdot 6$

$A_{ABHG} = 15\,m^2$

$A_{IDEF} = 4 \cdot 5,6$

$A_{IDEF} = 22,4\,m^2$

$A_{CIHJ} = 1 \cdot 4,8$

$A_{CIHJ} = 4,8\,m^2$

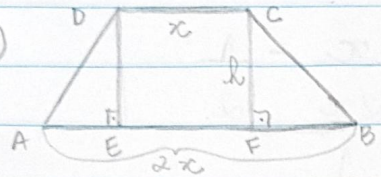
$\overline{DE} = 6 - 1,2 + 0,8$

$\overline{DE} = 5,6\,m$

$A_{TOTAL} = 15 + 22,4 + 4,8$

$42,2\,m^2$

⑦



$A = 36\,cm^2$

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

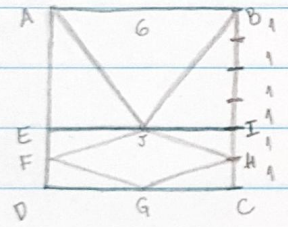
$72 = 3x \cdot h$

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

$A_{CDEF} = x \cdot \frac{24}{x} = 24\,cm^2$

Alternativa (E)

⑧



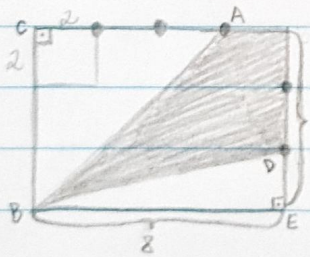
$A_{ABJ} = \frac{6 \cdot 4}{2} = 12\,cm^2$

$K = \frac{6}{12} = \frac{1}{2}$

$A_{FGHJ} = \frac{2 \cdot 6}{2} = 6\,cm^2$

Alternativa (D)

⑨



$A = 48$

12 quadradinhos com $A = 4$

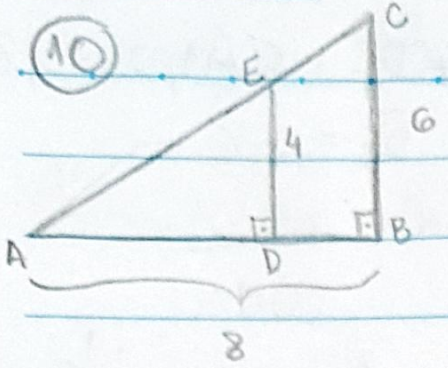
$A_{ABC} = \frac{6 \cdot 6}{2} = 18$

$A_{BDE} = \frac{8 \cdot 2}{2} = 8$

$A_{CINZA} = 48 - 18 - 8 = 22$

Alternativa (E)

(10)



A_{ADE}

$A_{ABC} = 2A_{ADE}$

$\frac{A_{ADE}}{2A_{ADE}} = \left(\frac{x}{8}\right)^2$

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

$2x^2 = 64$

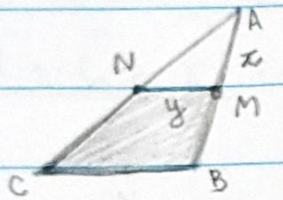
$x^2 = 32$

$x = 4\sqrt{2}$

Alternativa (A)

32	2	4	2
16	2	2	2
8	2	1	

(11)



$A = 96\,m^2$

$A_{AMN} = \frac{1}{4} \cdot 96 = 24\,m^2$

$A_{BMNC} = 96 - 24 = 72\,m^2$

$k = \frac{x}{2x} = \frac{1}{2}$

$k^2 = \frac{1}{4}$