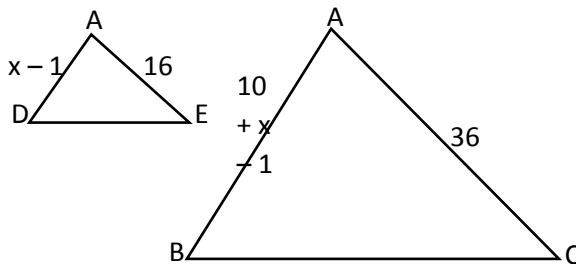
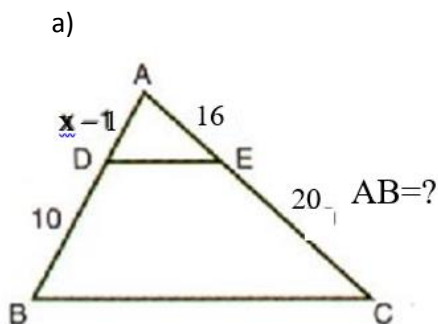
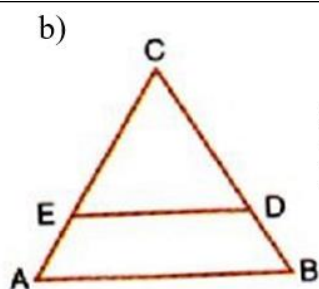


GABARITO DA LISTA 01

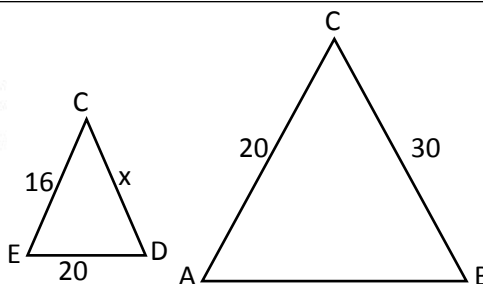


$$\frac{x-1}{x+9} = \frac{16}{36}$$

$$\begin{aligned} 36x - 36 &= 16x + 144 \\ 36x - 16x &= 144 + 36 \\ 20x &= 180 \\ x &= 180/20 \\ x &= 9 \\ AB &= 10 + 9 - 1 \\ AB &= 18 \end{aligned}$$

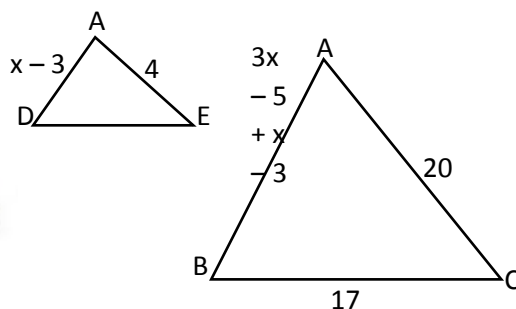
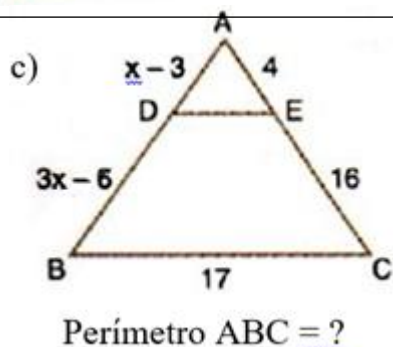


AC=20 EC=16
BC=30 ED=20
Perímetro CED=?



$$\frac{16}{20} = \frac{x}{30}$$

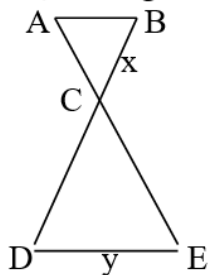
$$\begin{aligned} 20x &= 480 \\ x &= 480/20 \\ x &= 24 \\ P_{CED} &= 16 + 20 + 24 \\ P_{CED} &= 60 \end{aligned}$$



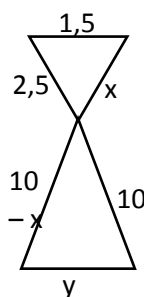
$$\frac{x-3}{4x-8} = \frac{4}{20}$$

$$\begin{aligned} 20x - 60 &= 16x - 32 \\ 20x - 16x &= -32 + 60 \\ 4x &= 28 \\ x &= 7 \\ P_{ABC} &= 20 + 17 + 20 \\ P_{ABC} &= 57 \end{aligned}$$

d) Na figura, calcule x e y.



$\overline{AB} \parallel \overline{DE}$
AB = 1,5
AC = 2,5
BD = 10
CE = 10

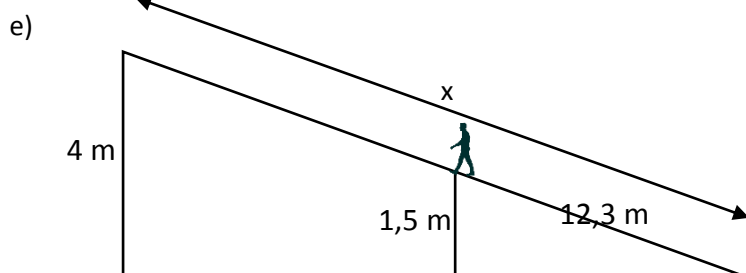


$$\frac{x}{10-x} = \frac{2,5}{10}$$

$$\frac{10}{2,5} = \frac{y}{1,5}$$

$$\begin{aligned} 10x &= 2,5(10-x) \\ 10x &= 25 - 2,5x \\ 10x + 2,5x &= 25 \\ 12,5x &= 25 \\ x &= 25/12,5 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} 2,5y &= 15 \\ y &= 15/2,5 \\ y &= 6 \end{aligned}$$

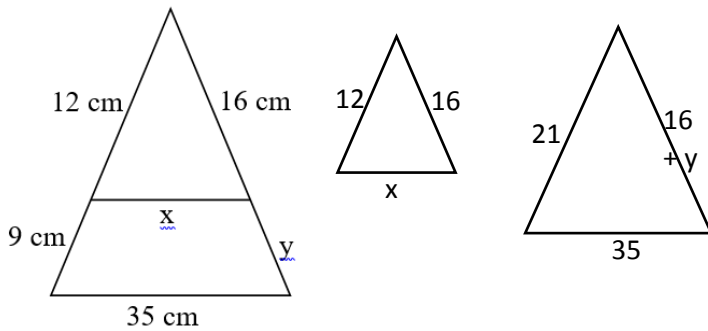


$$\frac{1,5}{4} = \frac{12,3}{x}$$

$$\begin{aligned} 1,5x &= 49,2 \\ x &= 49,2/1,5 \\ x &= 32,8 \end{aligned}$$

Falta caminhar $32,8 - 12,3 = 20,5$ m

f)



$$\frac{12}{21} = \frac{x}{35}$$

$$21x = 420$$

$$x = 420/21$$

$$x = 20$$

$$\frac{16}{16+y} = \frac{12}{21}$$

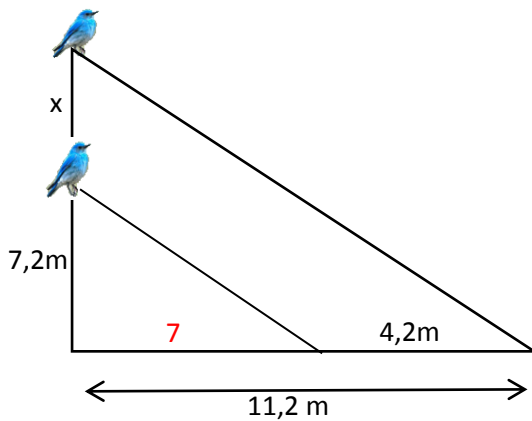
$$192 + 12y = 336$$

$$12y = 336 - 192$$

$$12y = 144$$

$$y = 12$$

g)



$$\frac{7,2}{7} = \frac{x + 7,2}{11,2}$$

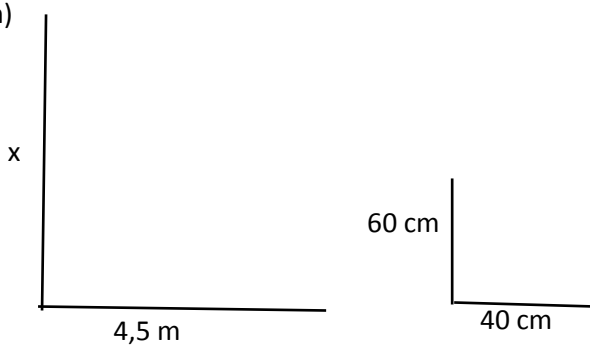
$$7x + 50,4 = 80,64$$

$$7x = 80,64 - 50,4$$

$$7x = 30,24$$

$$x = 4,32$$

h)



$$\frac{x}{0,60m} = \frac{4,5m}{0,40m}$$

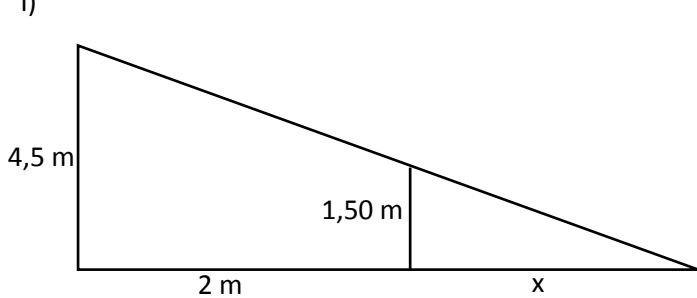
$$0,4x = 2,7$$

$$x = 2,7/0,4$$

$$x = 6,75 m$$

ATENÇÃO!!!
Para resolver uma proporção, os valores precisam estar na mesma unidade.

i)



$$\frac{4}{1,5} = \frac{2+x}{x}$$

$$4x = 3 + 1,5x$$

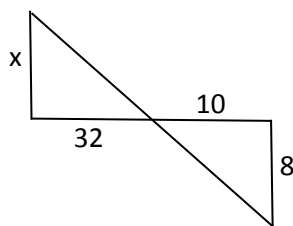
$$4x - 1,5x =$$

$$32,5x = 3$$

$$x = 2,5/3$$

$$x = 1,2 m$$

j)



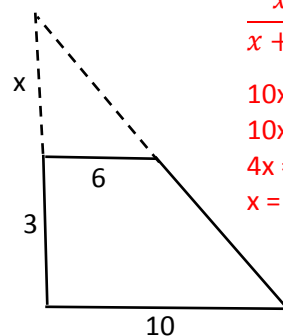
$$\frac{x}{8} = \frac{32}{10}$$

$$10x = 256$$

$$x = 25,6$$

$$R = 26 m$$

k)



$$\frac{x}{x+3} = \frac{6}{10}$$

$$10x = 6x + 18$$

$$10x - 6x = 18$$

$$4x = 18$$

$$x = 4,5$$

$$A_{tri} = \frac{b \cdot h}{2}$$

$$A_{tri} = \frac{b \cdot h}{2}$$

$$A_{tri} = 6 \times 4,5/2$$

$$A_{tri} = 13,5$$