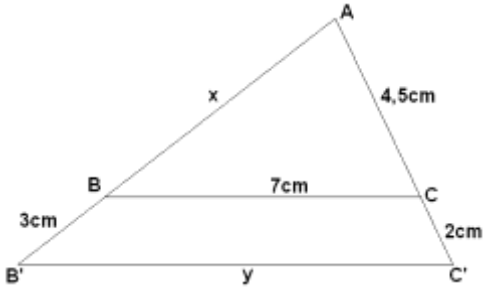
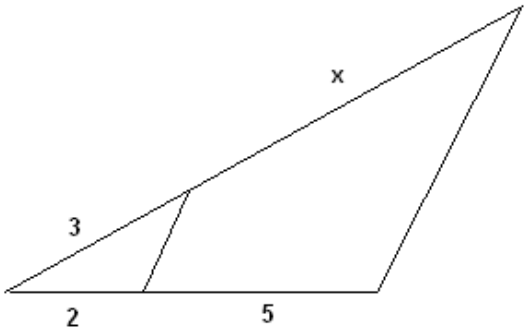
EJERCICIOS TEOREMA DE TALES.

(soluciones en la página 3)

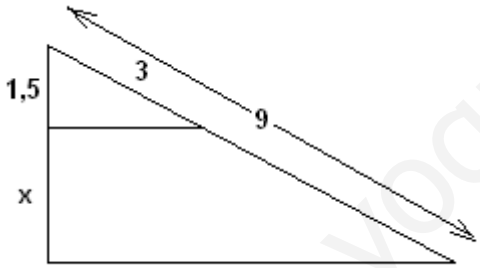
1.- Halla x e y en la siguiente figura:



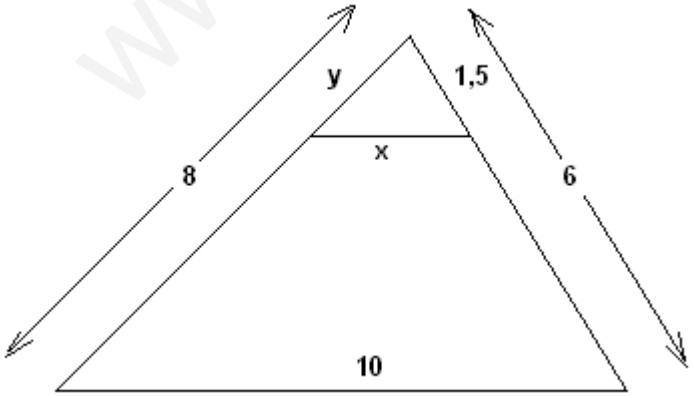
2.- Calcula x (todas las medidas están en centímetros).



3.- Calcula x (las unidades son metros):



4.- Calcula x e y (las unidades son metros):



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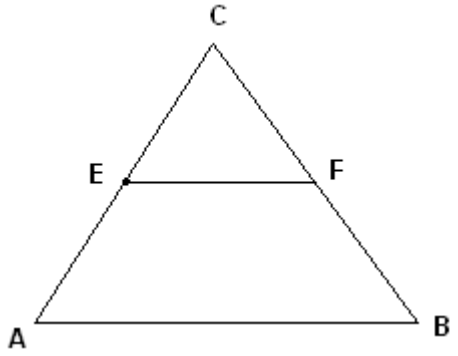
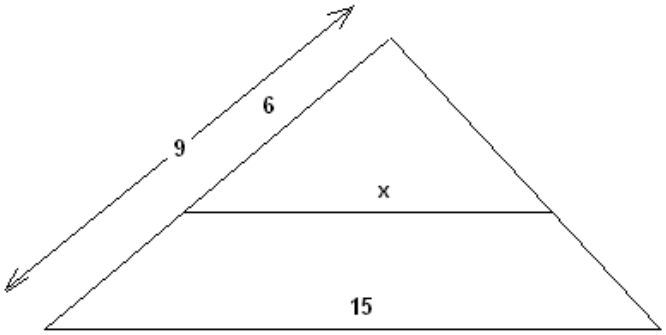
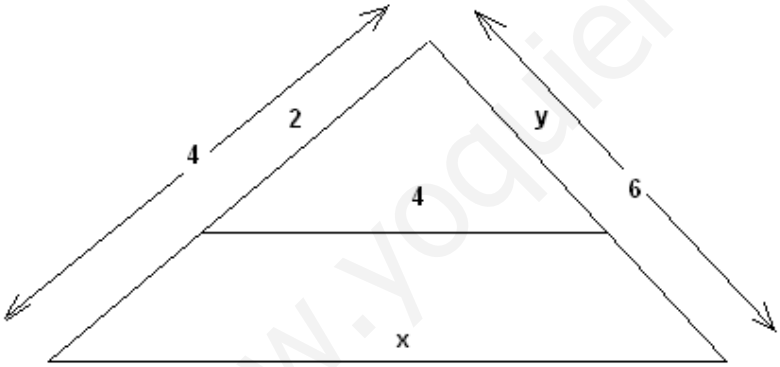
5.- Del siguiente dibujo conocemos: AC = 108 m, CE = 72 m, BF = 27 m. ¿Cuánto miden BC y CF?



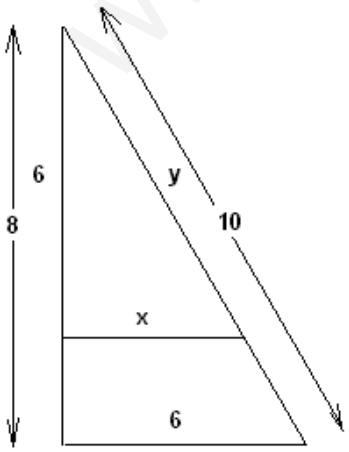
6.- Calcula x (las unidades son centímetros):



7.- Calcula x e y (las unidades son centímetros):



8.- Calcula x e y (las unidades son centímetros):



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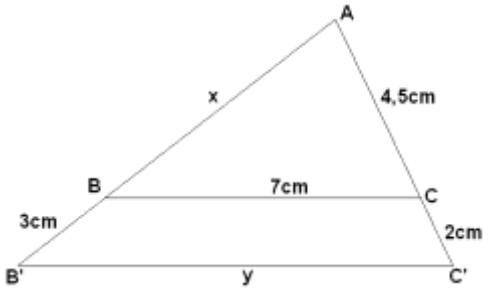
EJERCICIOS TEOREMA DE TALES: SOLUCIONES

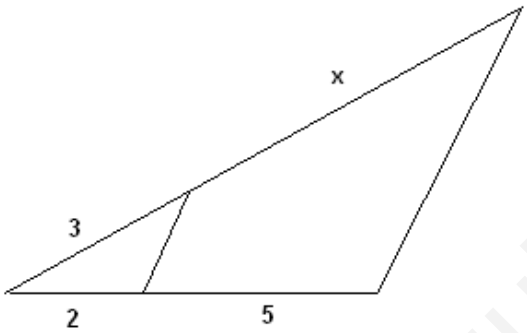
1.- Halla x e y en la siguiente figura:



Solución:Aplicando el Teorema de Tales: $\frac{x}{4,5}=\frac{3}{2}\Rightarrow x=\frac{3\cdot 4,5}{2}=6,75\,cm$

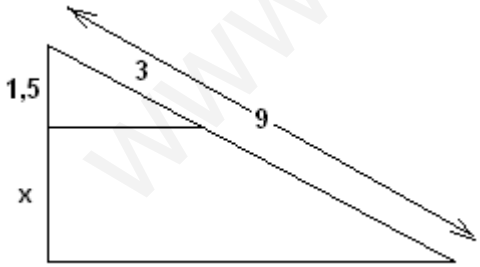
$\frac{4,5}{7}=\frac{6,5}{y}\Rightarrow y=\frac{7\cdot 6,5}{4,5}=10,11\,cm$

2.- Calcula x (todas las medidas están en centímetros).



Solución: $\frac{3}{2}=\frac{x}{5}\Rightarrow x=\frac{3\cdot 5}{2}=7,5\,cm$

3.- Calcula x (las unidades son metros):



Solución: $\frac{3}{1,5}=\frac{6}{x}\Rightarrow x=\frac{6\cdot 1,5}{3}=3\,m$

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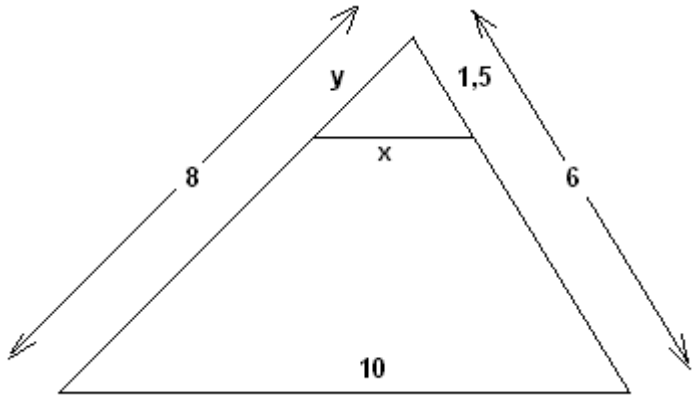
4.- Calcula x e y (las unidades son metros):

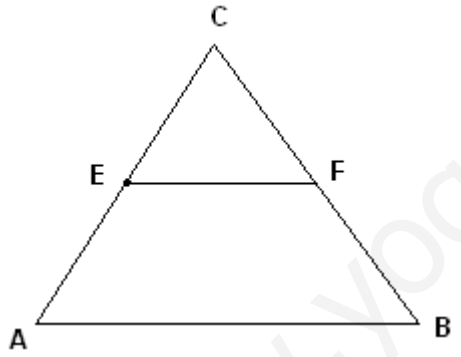


Solución:

$$\frac{6}{8} = \frac{1,5}{y} \Rightarrow y = \frac{8 \cdot 1,5}{6} = 2\,m$$

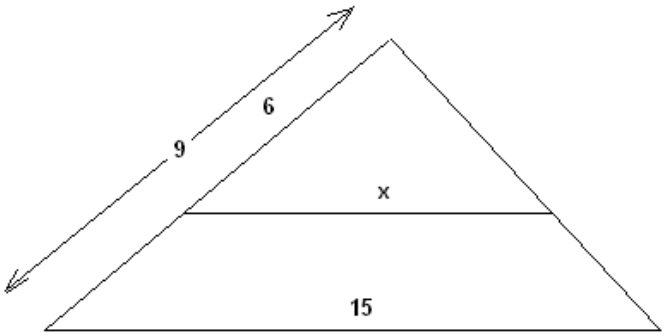
$$\frac{6}{10} = \frac{1,5}{x} \Rightarrow x = \frac{10 \cdot 1,5}{6} = 2,5\,m$$

5.- Del siguiente dibujo conocemos: AC = 108 m, CE = 72 m, BF = 27 m. ¿Cuánto miden BC y CF?



Solución: $\frac{108}{108-72} = \frac{BC}{27} \Rightarrow x = \frac{27 \cdot 108}{36} = 81\,m$ CF = 81 - 27 = 54 m

6.- Calcula x (las unidades son centímetros):



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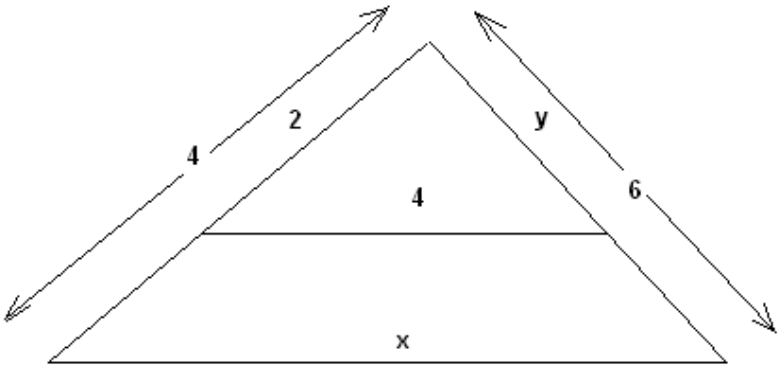
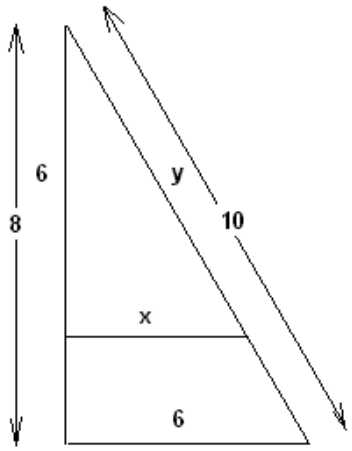
Solución: $\frac{9}{6}=\frac{15}{x}\Rightarrow x=\frac{6\cdot 15}{9}=10\,\text{cm}$

7.- Calcula x e y (las unidades son centímetros):



Solución: $\frac{4}{2}=\frac{6}{y}\Rightarrow y=\frac{6\cdot 2}{4}=3\,\text{cm}$ $\frac{4}{2}=\frac{x}{4}\Rightarrow x=\frac{4\cdot 4}{2}=8\,\text{cm}$

8.- Calcula x e y (las unidades son centímetros):



Solución: $\frac{6}{x}=\frac{8}{6}\Rightarrow x=\frac{6\cdot 6}{8}=4{,}5\,\text{cm}$ $\frac{8}{6}=\frac{10}{y}\Rightarrow y=\frac{6\cdot 10}{8}=7{,}5\,\text{cm}$

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