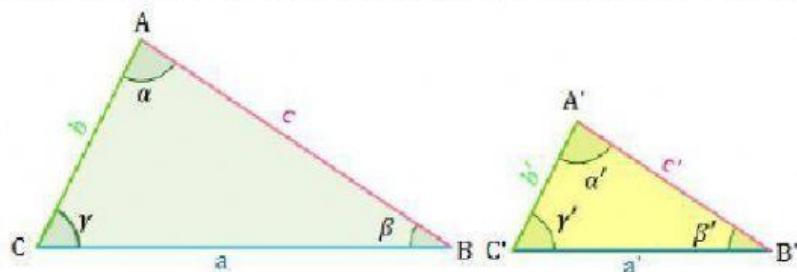
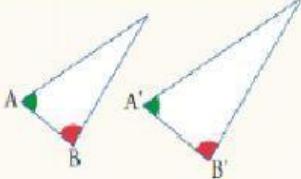
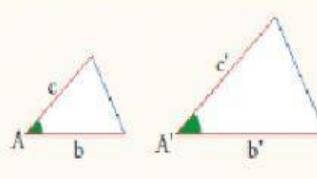
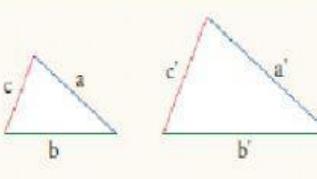


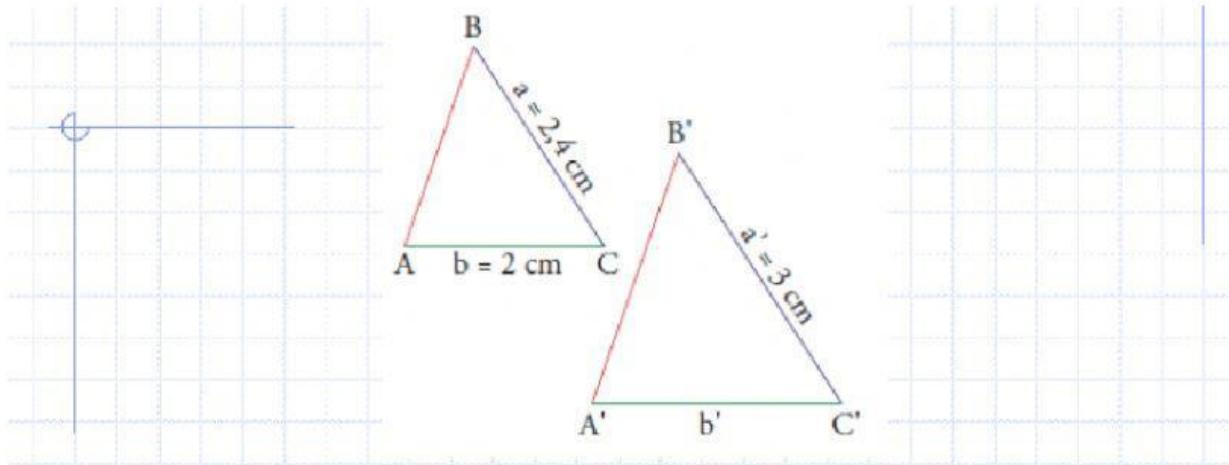
Semejanza de triángulos.

Dos triángulos son semejantes cuando tienen sus ángulos iguales y sus lados correspondientes son proporcionales.



Criterios de semejanza de triángulos

1º criterio	2º criterio	3º criterio
Dos triángulos son semejantes si tienen dos ángulos iguales.	Dos triángulos son semejantes si tienen un ángulo igual y los lados que los forman son proporcionales.	Dos triángulos son semejantes si tienen sus tres lados proporcionales.
 $A = A'$ y $B = B'$	 $A = A'$ y $\frac{b'}{b} = \frac{c'}{c}$	 $\frac{a}{c} = \frac{b}{b'} = \frac{c}{c'}$

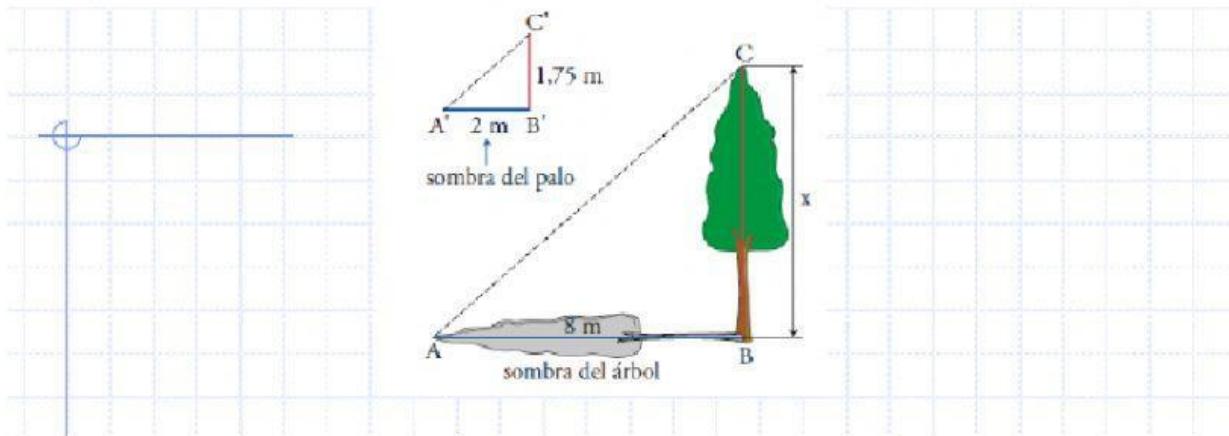


Ejemplo

Los triángulos ABC y A'B'C' del margen son semejantes. Halla:

- a) La razón de semejanza. b) La medida del lado b'

$$a) r = \frac{a'}{a} = \frac{3}{2,4} = 1,25 \quad b) \frac{b'}{b} = r \Rightarrow \frac{b'}{2} = 1,25 \Rightarrow b' = 1,25 \cdot 2 = 2,5 \text{ cm}$$



Ejemplo

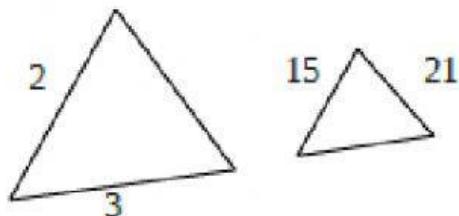
Un palo vertical que mide 1,75 m proyecta una sombra de 2 m. ¿Cuánto mide de alto un árbol cuya sombra mide 8 m el mismo día, a la misma hora y en el mismo lugar? Redondea el resultado a dos decimales.

$$\frac{2}{1,75} = \frac{8}{x} \Rightarrow x = 7 \text{ m}$$

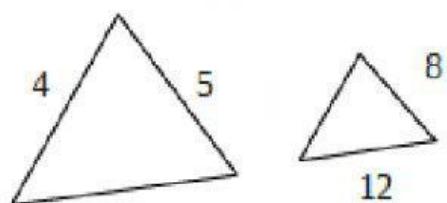
$$8 \times 1.75 \div 2 = 7$$

1. Elige la opción correcta:

a)

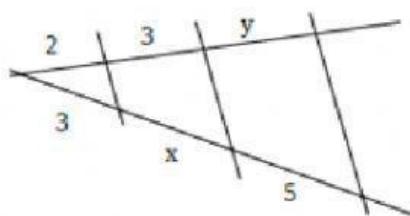


b)

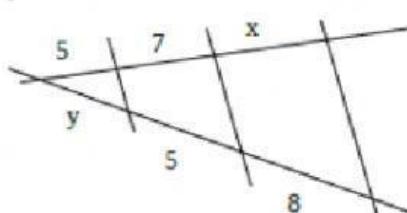


2. Arrastra la solución debajo de la figura que corresponda:

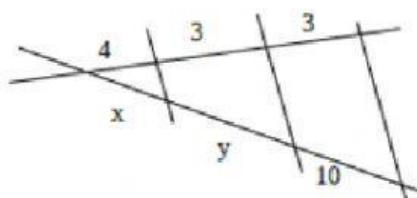
a)



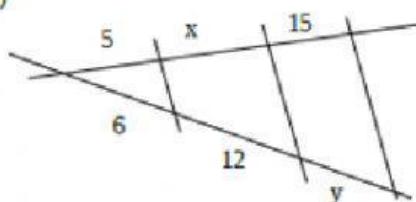
b)



c)



d)



Solución: $x=56/5$; $y=25/7$

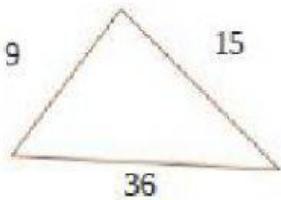
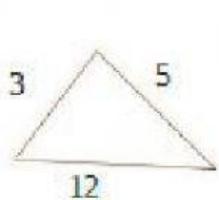
Solución: $x=9/2$; $y=10/3$

Solución: $x=40/3$; $y=10$

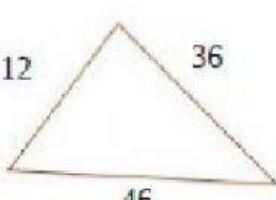
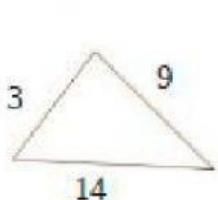
Solución: $x=10$; $y=18$

3. Marca las parejas que sean semejantes:

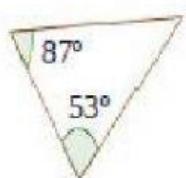
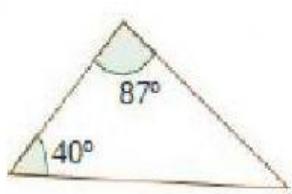
a)



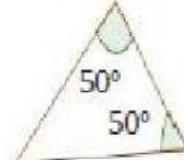
b)



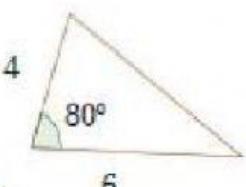
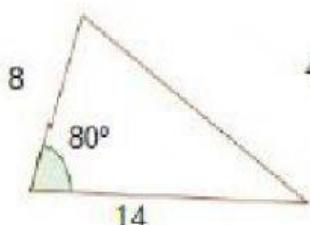
c)



d)



e)



f)

