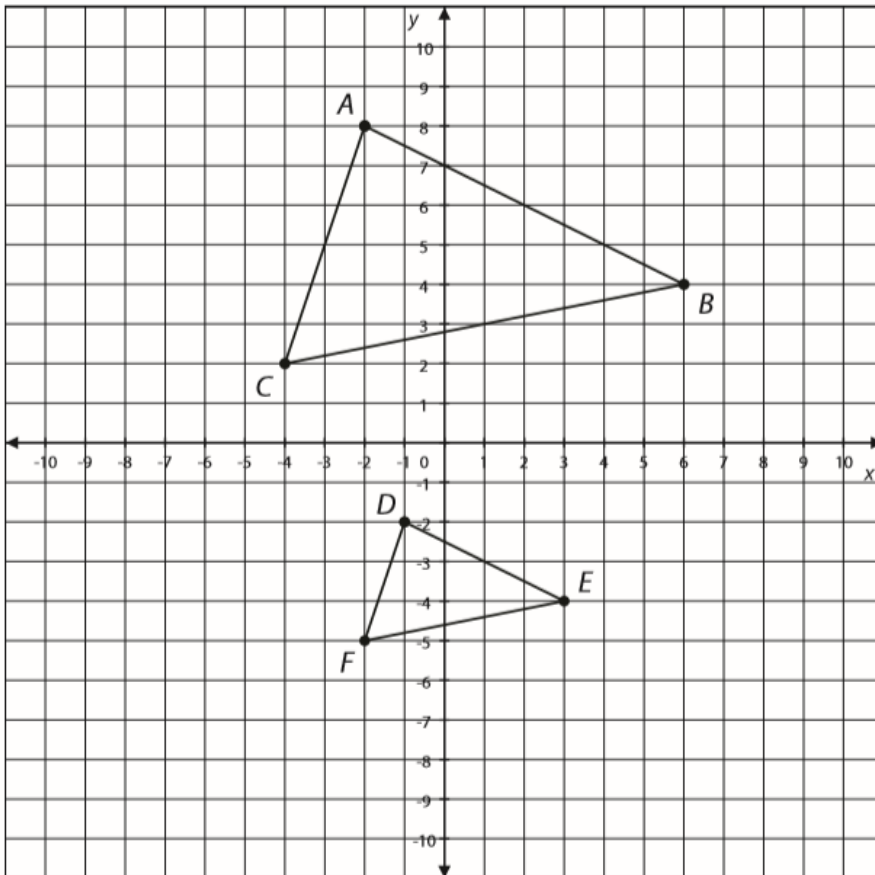
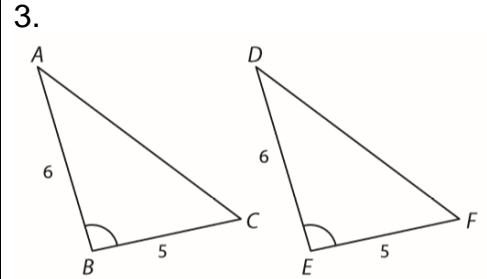
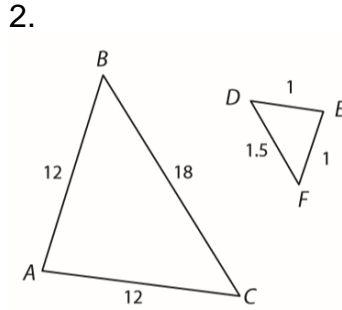
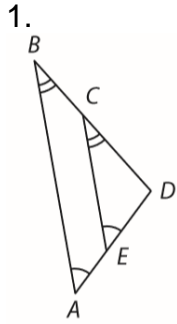


Decide whether each pair of triangles is similar. Explain your answer. (AA, SAS, SSS)



4. Find the length of each side.

$$\overline{AB} = \underline{\hspace{2cm}}$$

$$\overline{BC} = \underline{\hspace{2cm}}$$

$$\overline{AC} = \underline{\hspace{2cm}}$$

$$\overline{DE} = \underline{\hspace{2cm}}$$

$$\overline{EF} = \underline{\hspace{2cm}}$$

$$\overline{DF} = \underline{\hspace{2cm}}$$

Determine whether the scale factors are the same for each.

$$\frac{AB}{DE} = \underline{\hspace{2cm}}$$

$$\frac{BC}{EF} = \underline{\hspace{2cm}}$$

$$\frac{AC}{DF} = \underline{\hspace{2cm}}$$

Are the two triangles similar?  
Yes or No

5.  $\triangle FGH$  has vertices  $F(4, -6)$ ,  $G(8, -6)$ , and  $H(6, -2)$ . If  $\triangle FGH$  is dilated through the origin with a scale factor of  $\frac{1}{2}$ , what are the vertices of  $\triangle F'G'H'$ ?

$$F'(\quad, \quad)$$

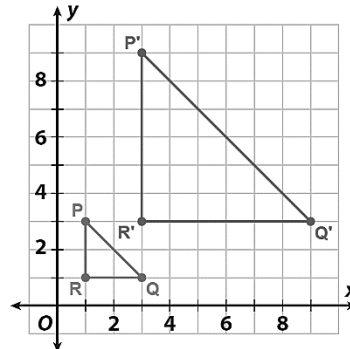
$$G'(\quad, \quad)$$

$$H(\quad, \quad)$$

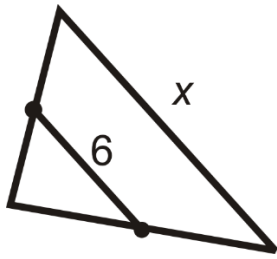
6.  $\overline{AB}$  is 8 units long. If  $\overline{AB}$  is dilated by a scale factor of  $k = 10$ , what is the length of  $\overline{A'B'}$ ?

$$\overline{A'B'} = \underline{\hspace{2cm}}$$

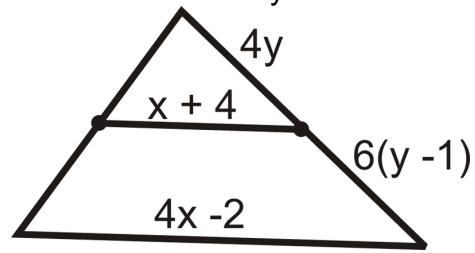
7. Find the scale factor of the given dilation and determine if an enlargement or reduction occurred.



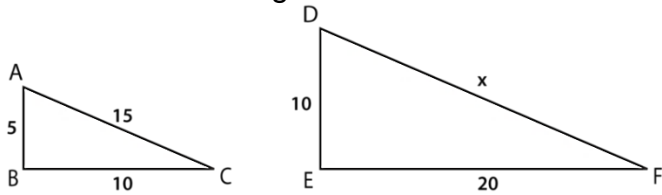
8. Find  $x$ .



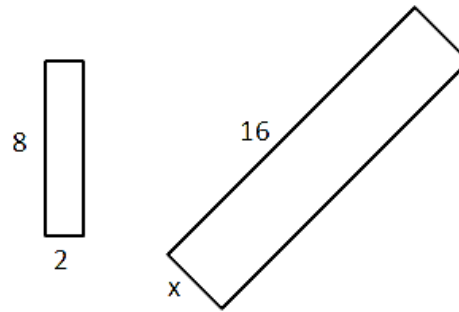
9. Solve for  $x$  and  $y$ .



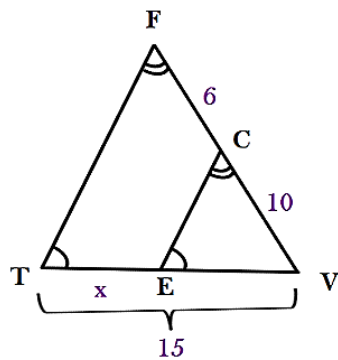
10. What is the length of  $\overline{DF}$ ?



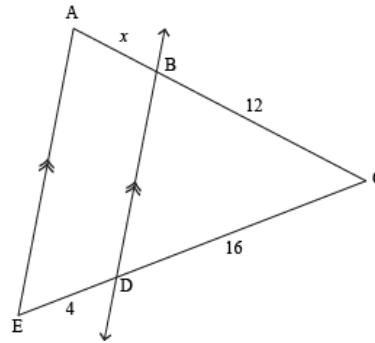
11. Find the value of  $x$ .



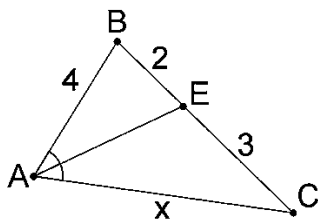
12. Solve for  $\overline{TE}$ .



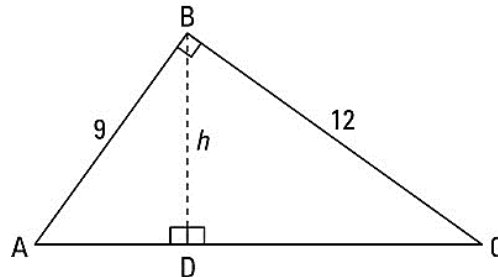
13. Find  $\overline{AB}$ .



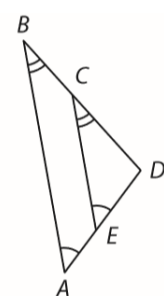
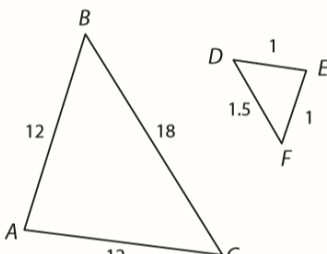
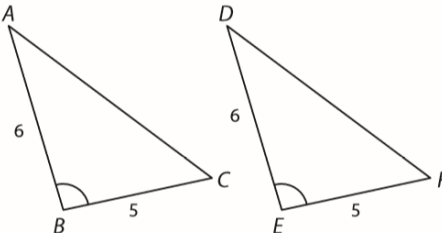
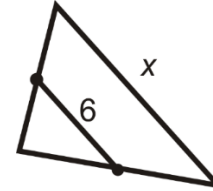
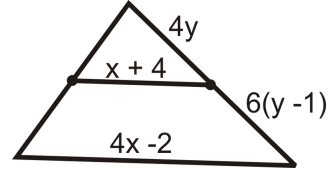
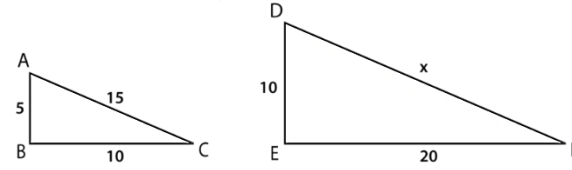
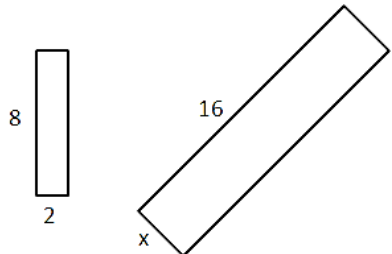
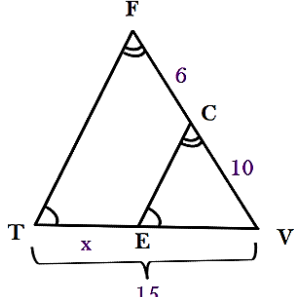
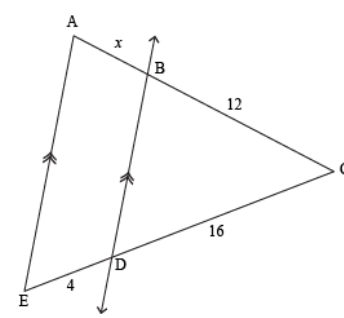
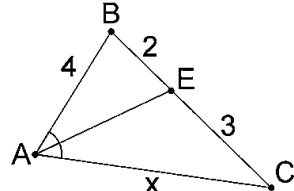
14. Find  $x$ .



15. Find  $h$ .



Decide whether each pair of triangles are similar. Explain your answer. (AA, SAS, SSS, NEI, not ~)

<p>1.</p> 	<p>2.</p> 	<p>3.</p> 
<p>4. Find x.</p> 	<p>5. Solve for x and y.</p> 	
<p>6. What is the length of <math>\overline{DF}</math>?</p> 	<p>7. Find the value of x.</p> 	
<p>8. Solve for <math>\overline{TE}</math>.</p> 	<p>9. Find <math>\overline{AB}</math>.</p> 	
<p>10. Find x.</p> 	<p>11. Find h.</p> 