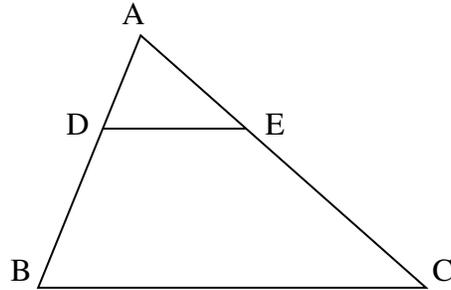


Fill in the missing line segment names to make the proportions true:

1. $\frac{AD}{?} = \frac{AE}{AC}$

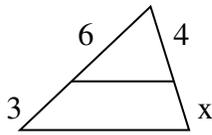
2. $\frac{EC}{AC} = \frac{?}{AB}$

3. $\frac{AD}{DB} = \frac{AE}{?}$

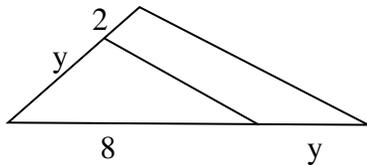


Use proportions to solve for the missing value.

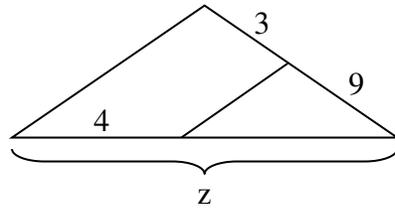
4. $x =$



5. $y =$

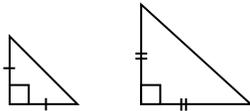


6. $z =$

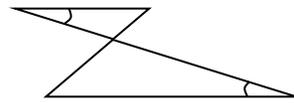


Determine whether each pair of triangles is similar. State the theorem you used.

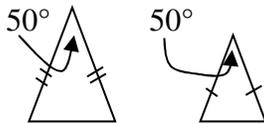
7.



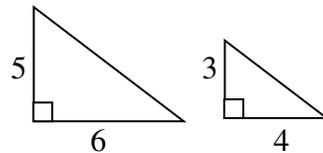
10.



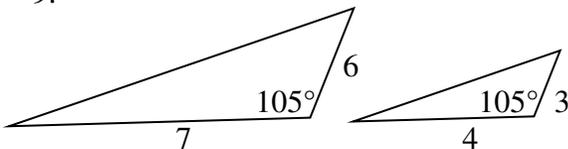
8.



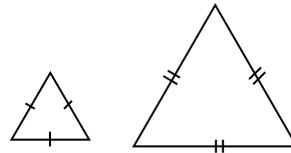
11.



9.



12.



Solve each proportion.

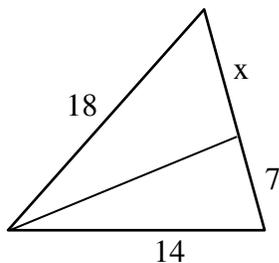
13. $\frac{6}{x} = \frac{10}{7}$

15. $\frac{x+1}{3} = \frac{x-2}{2}$

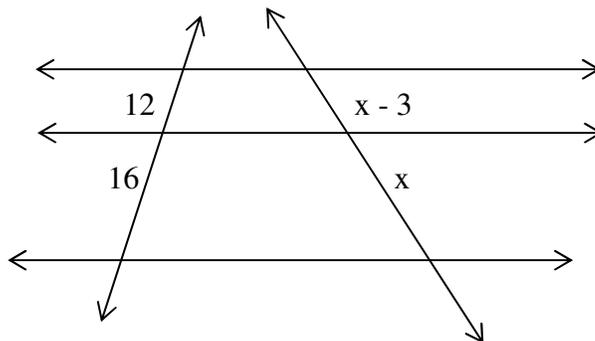
14. $\frac{16}{x} = \frac{x}{4}$

Find the value of x .

16.

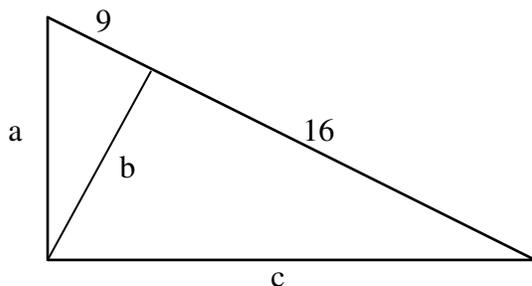


17.



Find the value of a , b , and c .

18.



19. A map has a scale of 2 inches = 150 miles. A road on the map is 3.5 inches long. How long is the actual road?

20. A postcard is 4 inches by 6 inches. It is enlarged on a copier until the shorter side is 10 inches long. How long is the longer side of the copy?