

Chapter 5: Similarity
Lesson 5-4: Proportional Parts
Homework

Name _____
 Date _____
 Period ____

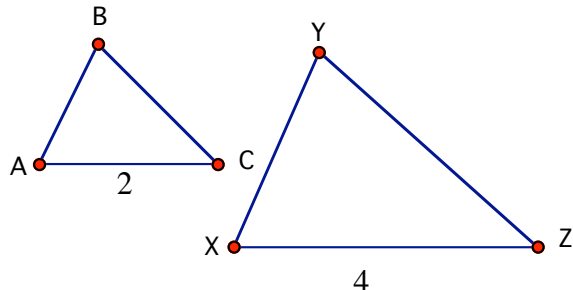
The two polygons are similar. Complete each statement.

1. $\triangle ACB \sim \triangle$ _____

2. $\frac{AC}{XZ} = \frac{?}{YZ} = \frac{AB}{?}$

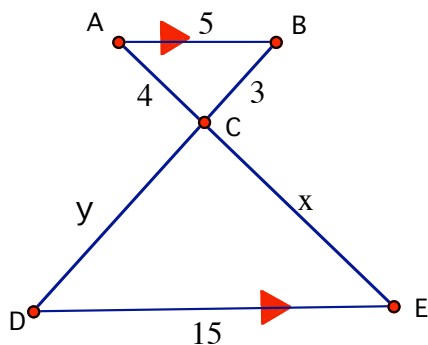
3. Find the scale factor. _____

4. $\angle B \cong \angle$ _____ $\angle$ _____ $\cong \angle Z$



Complete each statement.

5.

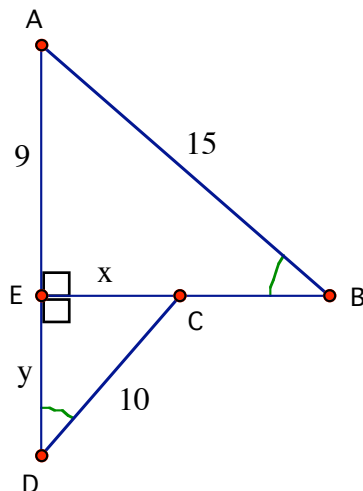


a. $\triangle ECD \sim \triangle$ _____

b. $x =$

c. $y =$

6.



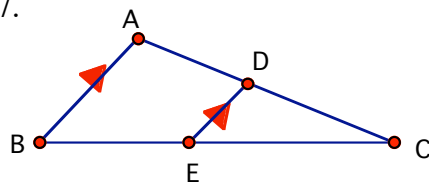
a. $\triangle DEC \sim \triangle$ _____

b. $x =$

c. $y =$

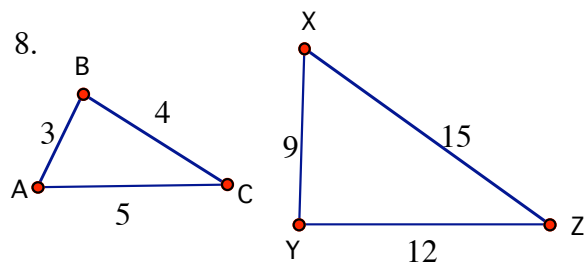
Name the theorem or postulate that justifies that each triangle is similar. Then state the similar triangles.

7.



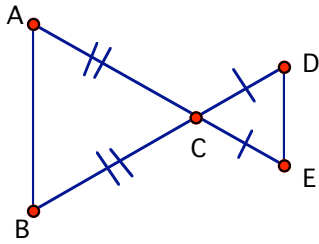
$\triangle$ _____ $\sim \triangle$ _____; by _____

8.



$\triangle$ _____ $\sim \triangle$ _____; by _____

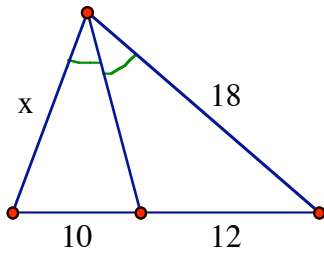
9.



$\triangle \underline{\hspace{1cm}} \sim \triangle \underline{\hspace{1cm}}; \text{ by } \underline{\hspace{1cm}}$

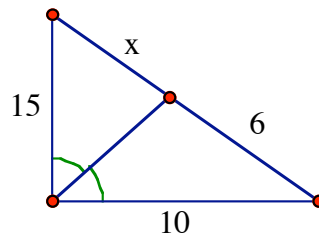
Find x.

10.



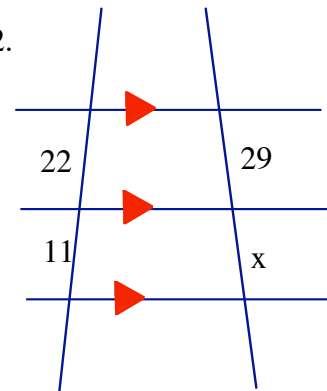
x = _____

11.



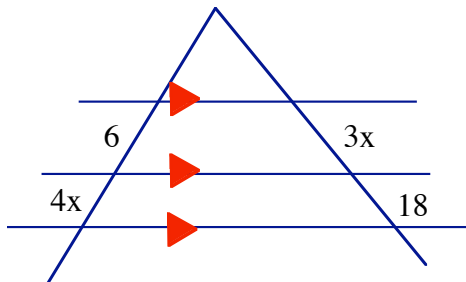
x = _____

12.



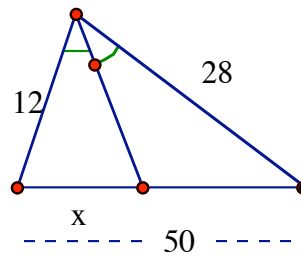
x = _____

13.



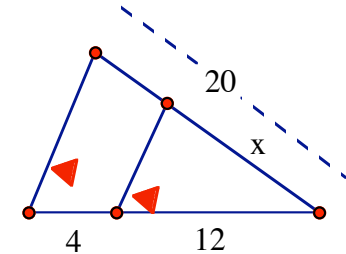
x = _____

14.



x = _____

15.



x = _____