

Similar Polygons

For use after Chapter 7

Write the algebraic ratio in simplest form.

1. $\frac{6x^2y}{24xy^2}$ _____

2. $\frac{a(x-2)}{5(x-2)}$ _____

3. $\frac{x+6}{4x+24}$ _____

Complete.

4. If $\frac{x}{2} = \frac{4}{5}$, then $5x =$ _____.

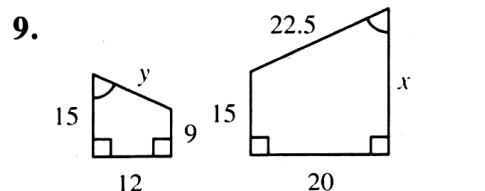
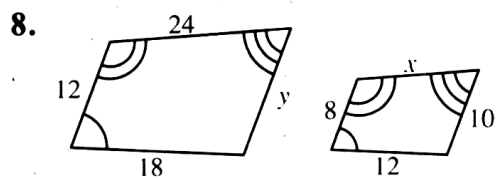
5. If $\frac{x}{y} = \frac{4}{5}$, then $\frac{y}{x} =$ _____.

Find the value of x .

6. $\frac{x}{5} = \frac{16}{20}$ $x =$ _____

7. $\frac{x-3}{4} = \frac{9}{8}$ $x =$ _____

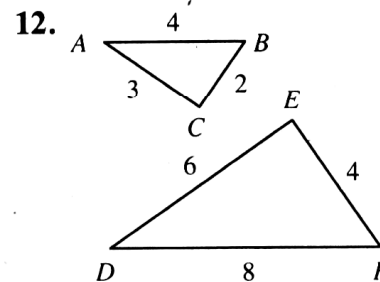
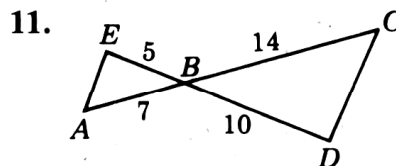
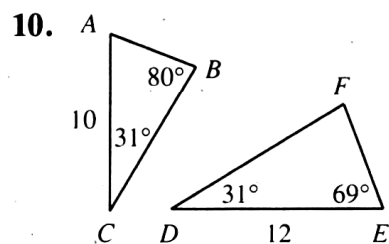
Two similar polygons are shown. Find the values of x and y .



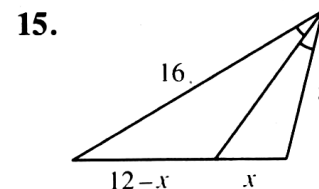
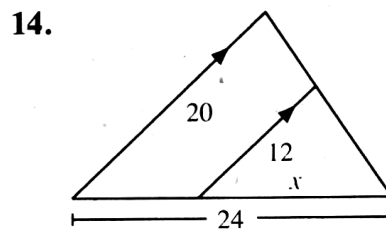
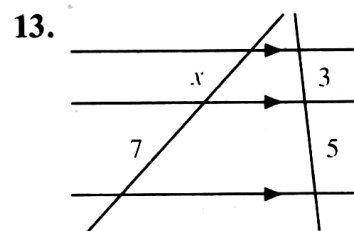
$x =$ _____; $y =$ _____

$x =$ _____; $y =$ _____

Name two similar triangles. Also name the theorem or postulate that justifies your answer.



Find the value of x .



$x =$ _____

$x =$ _____

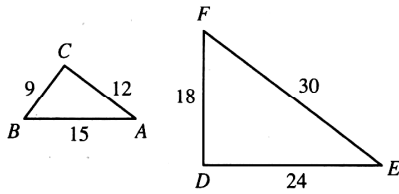
$x =$ _____

Theorems for Similar Triangles

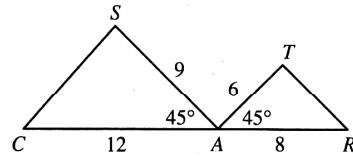
For use after Section 7-5

In Exercises 1-6 name two similar triangles. Also name the theorem or postulate that justifies your answer.

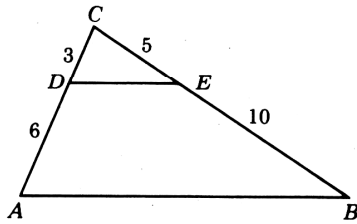
1.



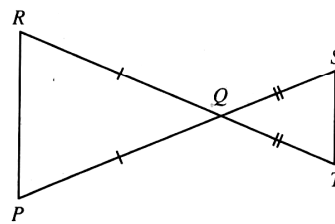
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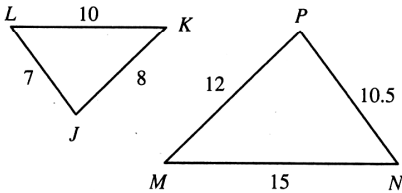
3.



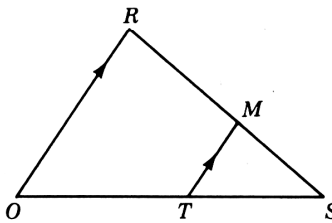
4.



5.

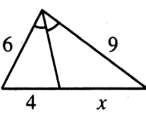


6.



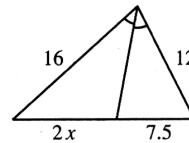
Find the value of x .

9.



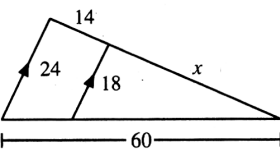
$x =$ _____

10.



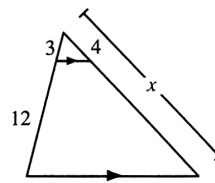
$x =$ _____

11.



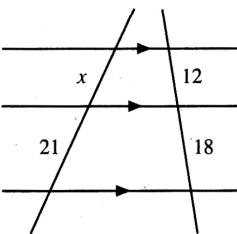
$x =$ _____

12.



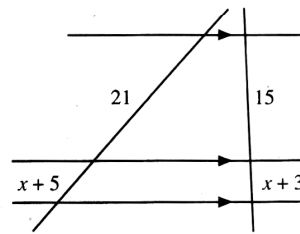
$x =$ _____

13.



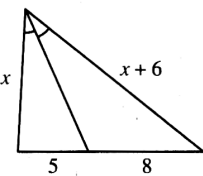
$x =$ _____

14.



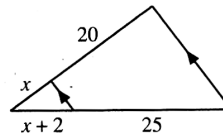
$x =$ _____

15.



$x =$ _____

16.



$x =$ _____