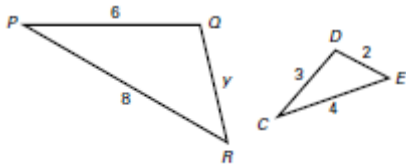


**Geometry: Chapter 6 Test**  
**SHOW ALL WORK and box all final answers.**

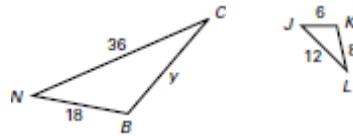
Name \_\_\_\_\_

Given similar triangles, find the value of  $y$ .

1.  $\triangle PQR \sim \triangle CDE$

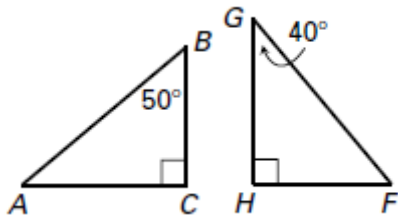


2.  $\triangle JKL \sim \triangle NBC$

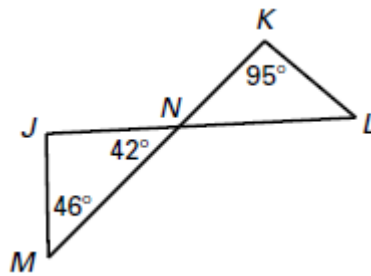


In Exercises 3-6, determine whether the triangles are similar. If they are, tell if they are similar by AA, SAS, or SSS.

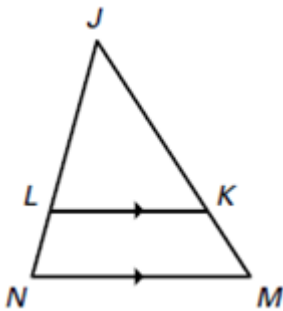
3.



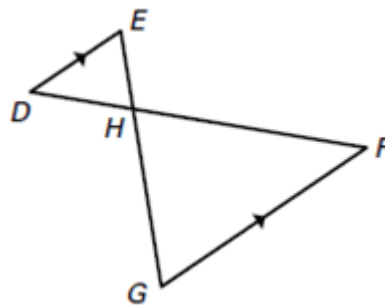
4.



5.

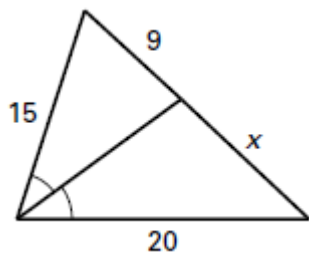


6.

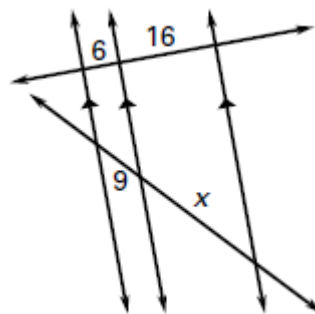


Find the value of  $x$ .

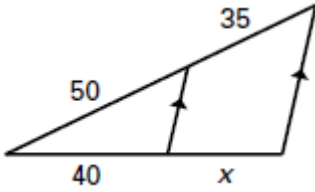
7.



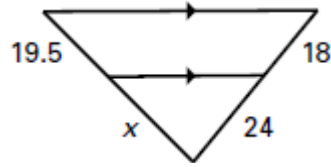
8.



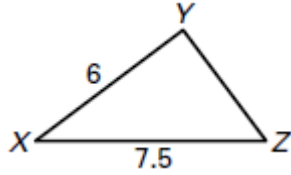
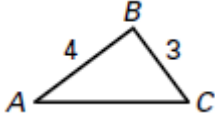
9.



10.



In the diagram,  $\triangle ABC \sim \triangle XYZ$ .



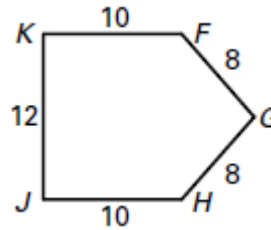
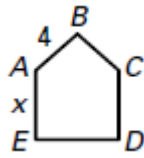
11. Find  $YZ$ .

12. Find  $AC$ .

In the diagram,  $ABCDE \sim FGHIJK$ .

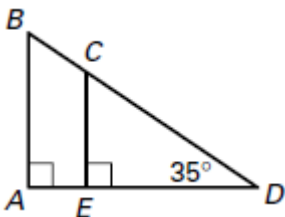
13. Find the value of  $x$ .

14. Find the perimeter of  $ABCDE$ .

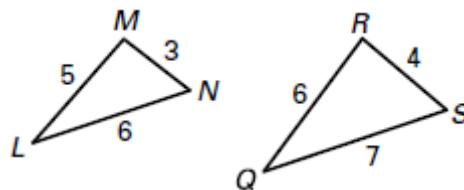


Determine whether the triangles are similar. If so, write the postulate or theorem that justifies your answer (AA, SAS, or SSS).

15.

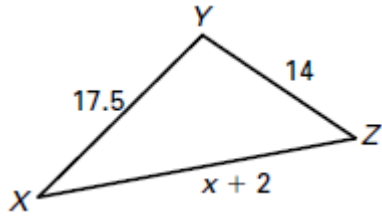
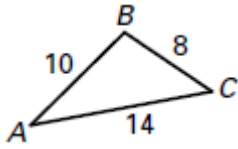


16.



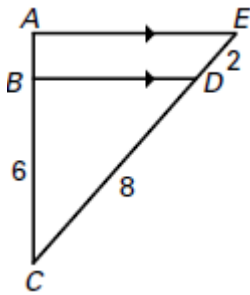
Determine the value of  $x$  that makes  $\triangle ABC \sim \triangle XYZ$ .

17.

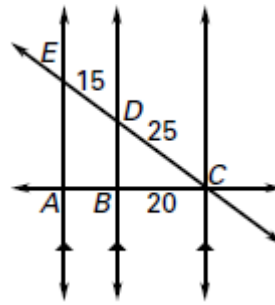


In Exercises 18 and 19, find the length of  $\overline{AB}$ .

18.

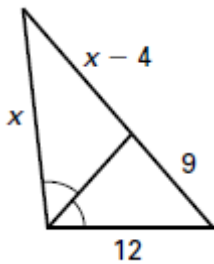


19.

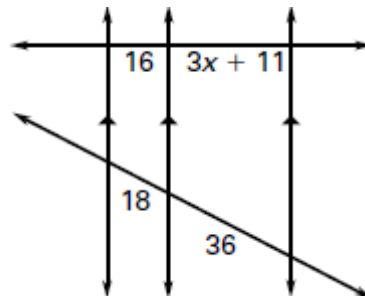


Find the value of  $x$ .

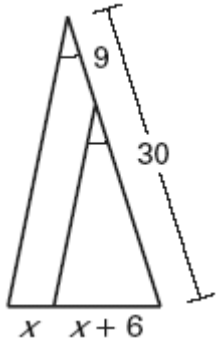
20.



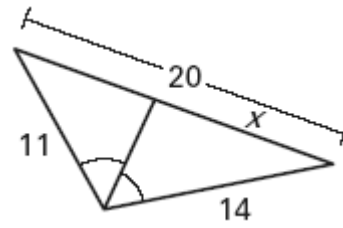
21.



22.

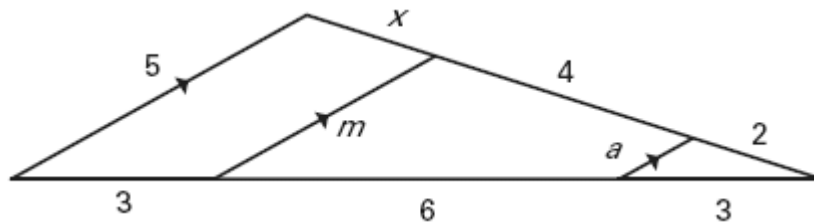


23.



Find the value of the variable.

24.  $x$



25.  $a$

26. A 4-ft person standing near a telephone pole has a shadow 3-ft long. At the same time, the telephone pole has a shadow of 18-ft long. What is the height of the telephone pole?

27. On a sunny day, if a 36-inch yardstick casts a 21-inch shadow, how tall is a building whose shadow is 168ft?