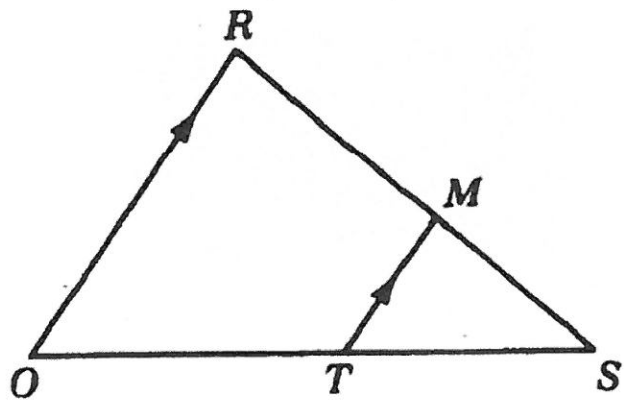


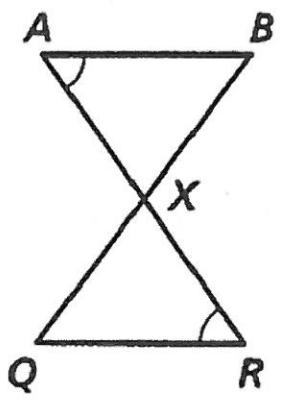
Name: _____

8.2 Practice Problems

1. State which similarity shortcut proves the two triangles are congruent and write a similarity statement.

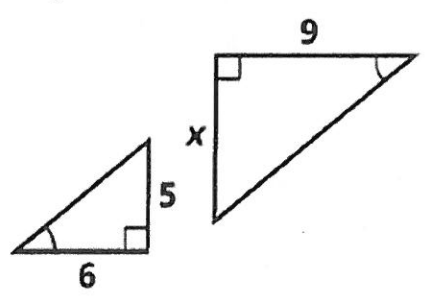


2. State which similarity shortcut proves the two triangles are congruent and write a similarity statement.

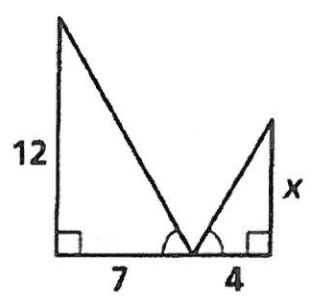


For 3-6, find the value of x .

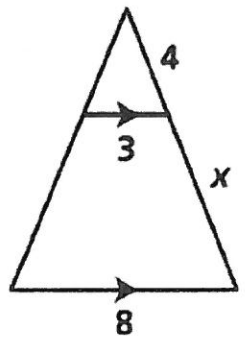
3.



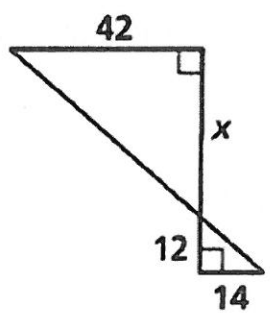
4.



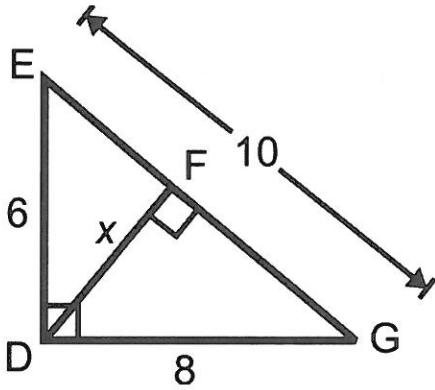
5.



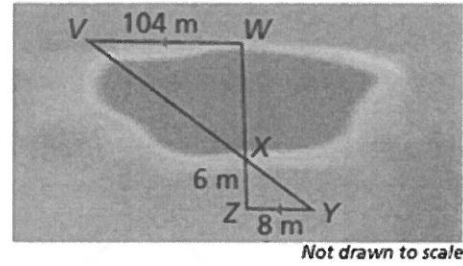
6.



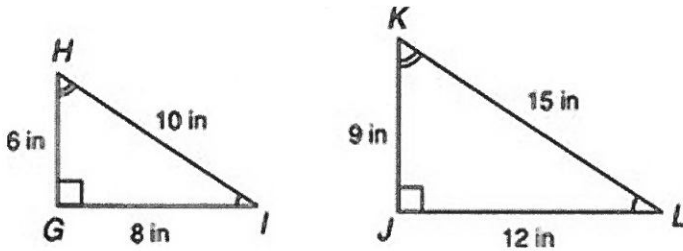
7. Solve for x



8. **MODELING WITH MATHEMATICS** You can measure the width of the lake using a surveying technique, as shown in the diagram. Find the width of the lake, WX . Justify your answer.

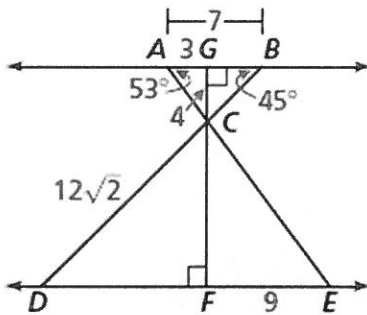


9. Find the ratio Area HGI : Area KJL.



10. Given the perimeter of triangle DEF is 3 longer than the perimeter of triangle ABC, how many times larger is the area of triangle DEF to triangle ABC.

In Exercises 11–18, use the diagram to copy and complete the statement.



11. $\triangle CAG \sim$

12. $\triangle DCF \sim$

13. $\triangle ACB \sim$

14. $m\angle ECF =$

15. $m\angle ECD =$

16. $CF =$

17. $BC =$

18. $DE =$

19. Find x , y , the perimeter of triangle ABG and the ratio Area ABG : Area ECG.

