LESSON 7.2

NAME _____ DATE _____

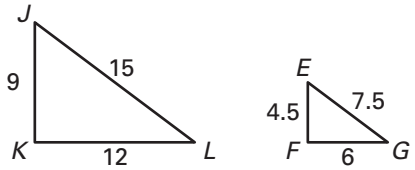
Practice B

For use with pages 364–371

Supply the missing word(s) to complete the statement.

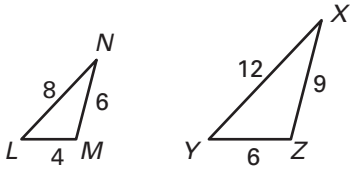
1. Two polygons are similar polygons if corresponding angles are __?__ and corresponding side lengths are __?__.
2. If two polygons are similar, then the ratio of the lengths of two corresponding sides is called the __?__.
3. If two polygons are similar, then the ratio of their __?__ is equal to the ratio of their corresponding side lengths.

In Exercises 4–6, $\triangle JKL \sim \triangle EFG$.



4. List all pairs of congruent angles.
5. Write the ratios of the corresponding sides in a statement of proportionality.
6. Find the scale factor of $\triangle JKL$ to $\triangle EFG$.

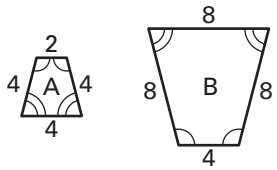
In Exercises 7–9, $\triangle NLM \sim \triangle XYZ$.



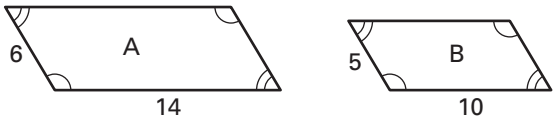
7. List all pairs of congruent angles.
8. Write the ratios of the corresponding sides in a statement of proportionality.
9. Find the scale factor of $\triangle NLM$ to $\triangle XYZ$.

Determine whether the polygons are similar. If they are similar, find the scale factor of figure A to figure B.

10.

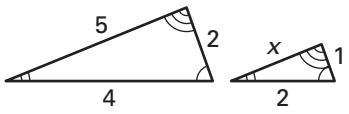


11.

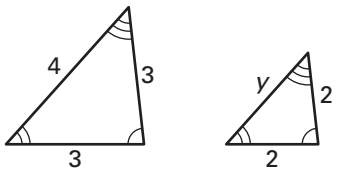


The two polygons are similar. Find the value of the variable.

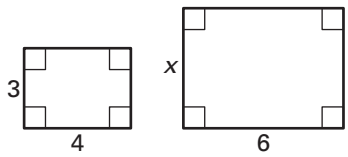
12.



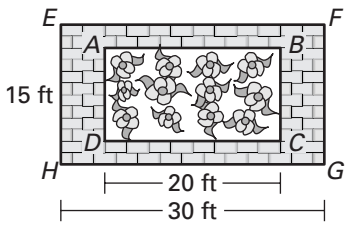
13.



14.



A flower garden is enclosed by a brick border, as shown at the right. The perimeters of the garden and the brick border are similar rectangles.



15. Find the ratio of the length of the border to the length of the garden.
16. Find the width of the flower garden.
17. Find the perimeter of the flower garden.

Lesson 7.2