## Practice C

For use with pages 473–479

**List all pairs of congruent angles and write the statement of proportionality for the figures.**

1. $\triangle STU \sim \triangle CDE$

2. $\triangle LMN \sim \triangle GHI$

3. quadrilateral $QRST \sim$ quadrilateral $ABCD$

**In the diagram quadrilateral *BCDE* ~ quadrilateral *WXYZ*.**

4. Find the scale factor of quadrilateral $BCDE$ to quadrilateral $WXYZ$.

5. Find the scale factor of quadrilateral $WXYZ$ to quadrilateral $BCDE$.

6. Find the length of $\overline{XY}$.

7. Find the measure of $\angle D$.

8. Find the perimeter of quadrilateral $WXYZ$.

9. Find the ratio of the perimeter of $WXYZ$ to the perimeter of $BCDE$.
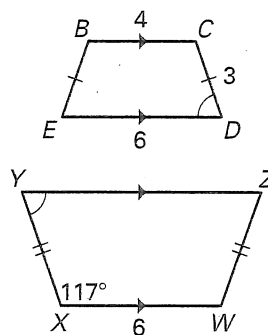
Decide whether the polygons are similar. If so, find the scale factor of Figure A to Figure B.

10.

11.
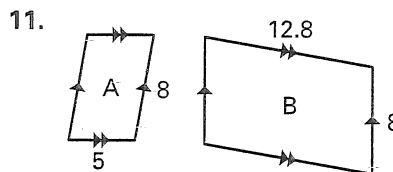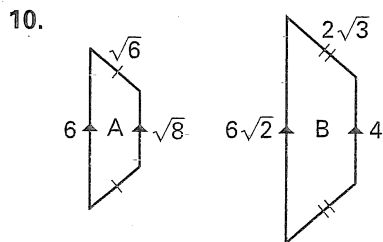
The two polygons are similar. Find the values of *x* and *y*.

12.

13.
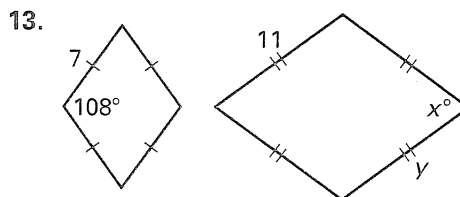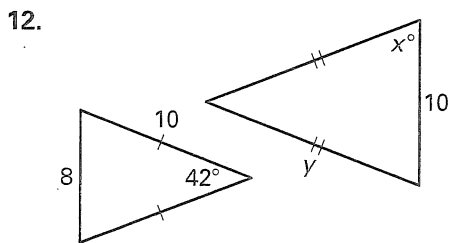
14. The ratio of one side of $\triangle ABC$ to the corresponding side of similar $\triangle DEF$ is 5:8. The perimeter of $\triangle DEF$ is 96 inches. What is the perimeter of $\triangle ABC$?

15. The perimeter of $\square ABCD$ is 60 centimeters. The perimeter of $\square EFGH$ is 15 centimeters and $\square ABCD \sim \square EFGH$. The lengths of two of the sides of $\square ABCD$ are 18 centimeters each. Find the scale factor of $\square ABCD$ to $\square EFGH$, and the lengths of the sides of $\square EFGH$.