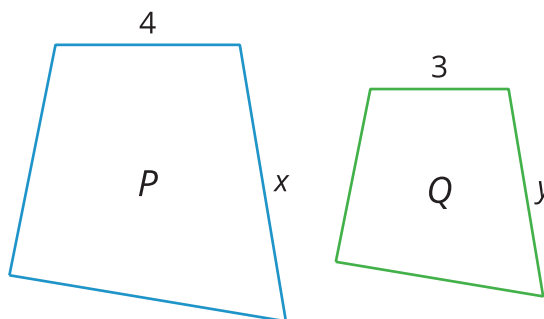# Lesson 1 Practice Problems

1. Polygon Q is a scaled copy of Polygon P.
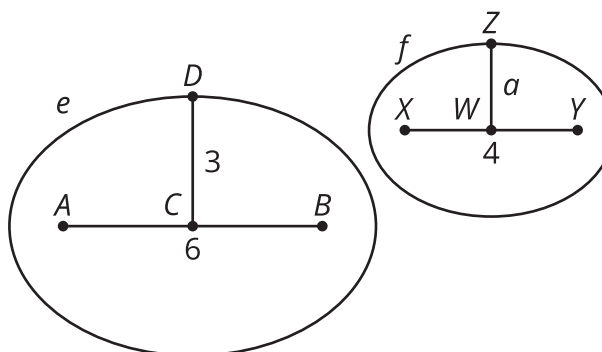
   a. The value of x is 6, what is the value of y?

   b. What is the scale factor?

2. Figure f is a scaled copy of Figure e .

   We know:

   ○ $AB = 6$

   ○ $CD = 3$

   ○ $XY = 4$

   ○ $ZW = a$

   Select **all** true equations.

   A. $\frac{6}{3} = \frac{4}{a}$

   B. $\frac{6}{4} = \frac{3}{a}$

   C. $\frac{3}{4} = \frac{6}{a}$

   D. $\frac{6}{3} = \frac{a}{4}$

   E. $\frac{6}{4} = \frac{a}{3}$

   F. $\frac{3}{4} = \frac{a}{6}$

3. Solve each equation.

a. $\frac{2}{5} = \frac{x}{15}$

b. $\frac{4}{3} = \frac{x}{7}$

c. $\frac{7}{5} = \frac{28}{x}$

d. $\frac{11}{4} = \frac{5}{x}$

4. Select the shape that has 180 degree rotational symmetry.

A. Rhombus

B. Trapezoid

C. Isosceles trapezoid

D. Quadrilateral

(From Unit 2, Lesson 14.)

5. Name a quadrilateral in which the diagonal is also a line of symmetry. Explain how you know the diagonal is a line of symmetry.
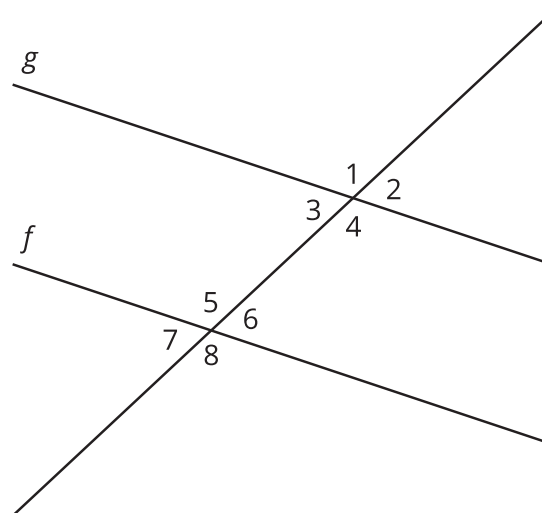
(From Unit 2, Lesson 14.)

6. In isosceles triangle DAC, AD is congruent to AC and AB is an angle bisector of angle DAC. How does Kiran know that AB is a perpendicular bisector of segment CD?
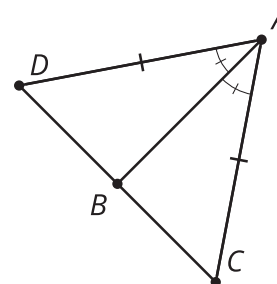
(From Unit 2, Lesson 8.)

7. In the figure shown, lines f and g are parallel. Select **all** angles that are congruent to angle 1.

A. 1

B. 2

C. 3

D. 4

E. 5

F. 6

G. 7

H. 8

(From Unit 1, Lesson 20.)