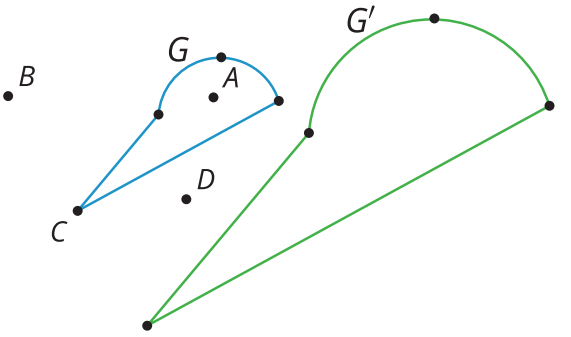
Lesson 2 Practice Problems

1. Figure G' is the image of figure G by a dilation with scale factor 2. Where is the center of this dilation?



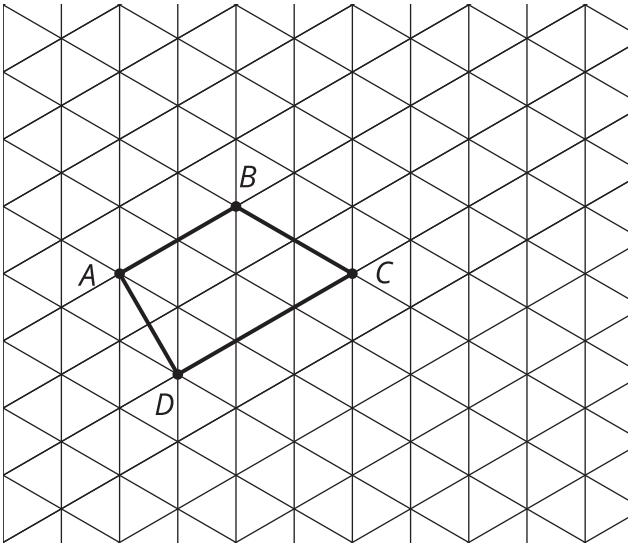
   A. Point A

   B. Point B

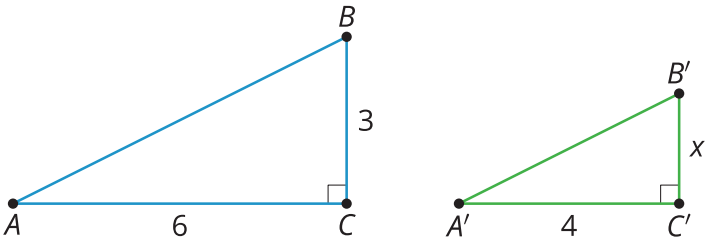
   C. Point C

   D. Point D

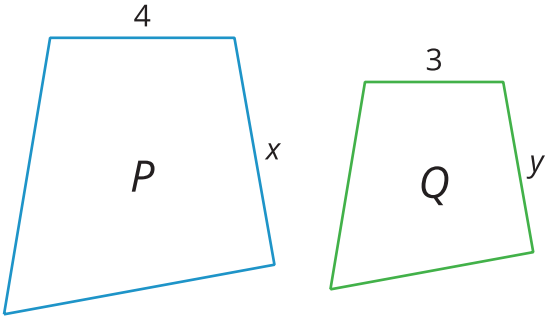
2. Dilate quadrilateral $ABCD$ using center A and scale factor $\frac{1}{2}$.



3. Triangle ABC is dilated. The image is $A'B'C'$, find the value of x.



4. Polygon Q is a scaled copy of Polygon P.



The value of x is 6, what is the value of y?

A. $\frac{7}{2}$

B. 4

C. $\frac{9}{2}$

D. 5

(From Unit 3, Lesson 1.)

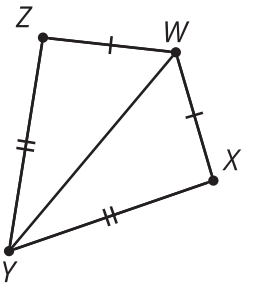
5. Solve each equation.

a. $\frac{2}{5} = \frac{x}{20}$

b. $\frac{2}{3} = \frac{x}{10}$

(From Unit 3, Lesson 1.)

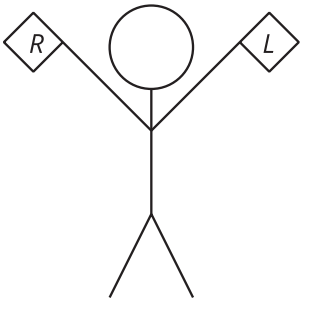
6. $WXYZ$ is a kite. Angle WXY has a measure of 94 degrees and angle ZYX has a measure of 60 degrees. Find the measure of angle ZWY.



(From Unit 2, Lesson 9.)

7. The semaphore alphabet is a way to use flags to signal messages. Here's how to signal the letter U. Describe a transformation that would take the right hand flag to the left hand flag.

U



(From Unit 1, Lesson 13.)