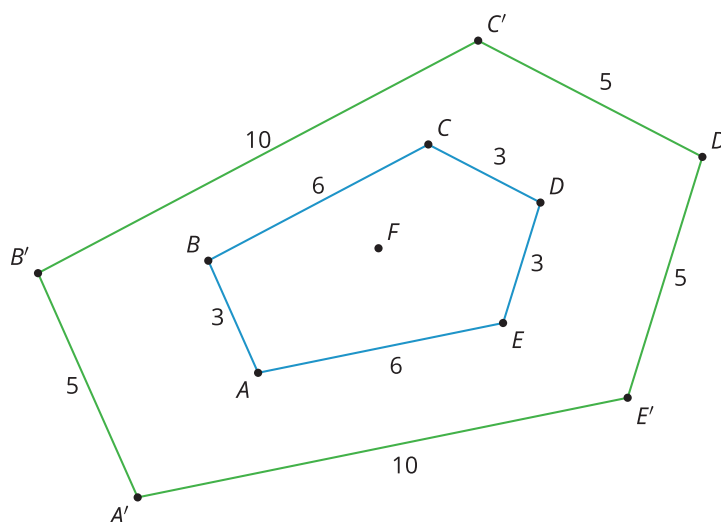


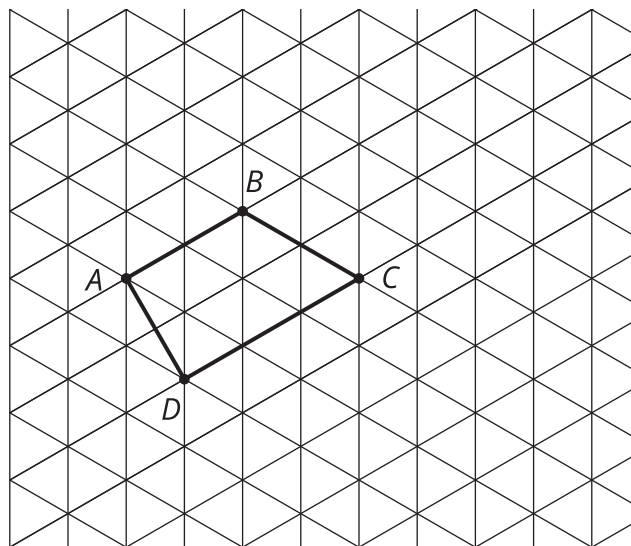
Lesson 3 Practice Problems

1. Pentagon $A'B'C'D'E'$ is the image of pentagon $ABCDE$ after a dilation centered at F . What is the scale factor of this dilation?



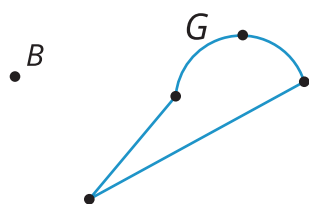
2. A polygon has perimeter 12 units. It is dilated with a scale factor of $\frac{3}{4}$. What is the perimeter of its image?
- A. 9 units
- B. 12 units
- C. 16 units
- D. It cannot be determined.
3. Triangle ABC is taken to triangle $A'B'C'$ by a dilation. Which of these scale factors for the dilation would result in an image that was *larger* than the original figure?
- A. $\frac{3}{5}$
- B. $\frac{13}{17}$
- C. 1
- D. $\frac{4}{3}$

4. Dilate quadrilateral $ABCD$ using center D and scale factor 2.



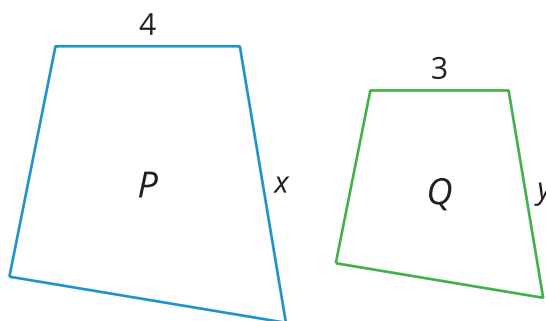
(From Unit 3, Lesson 2.)

5. Dilate Figure G using center B and scale factor 3.



(From Unit 3, Lesson 2.)

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

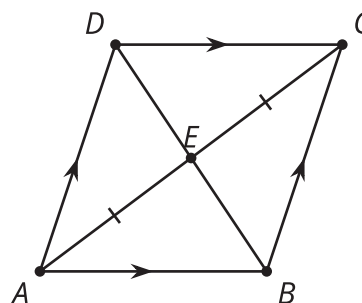


The value of x is 6, what is the scale factor?

- A. $\frac{3}{4}$
- B. $\frac{4}{3}$
- C. 3
- D. 4

(From Unit 3, Lesson 1.)

7. Prove that segment AD is congruent to segment BC .



(From Unit 2, Lesson 10.)