

NAME

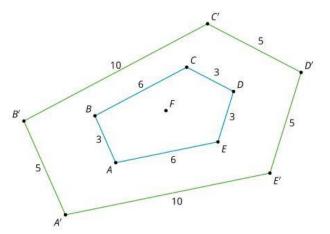
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PERIOD

Curated Practice Problem Set

Unit 3 Lesson 3 Cumulative 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. $\frac{4}{3}$

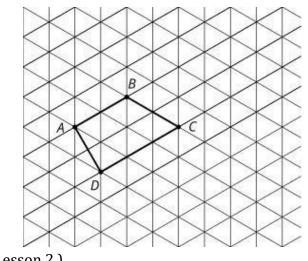


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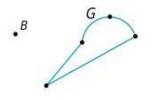
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4. Dilate quadrilateral *ABCD* using center *D* and scale factor 2.



(From Unit 3, Lesson 2.)

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

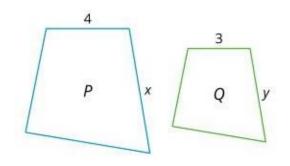


(From Unit 3, Lesson 2.)





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

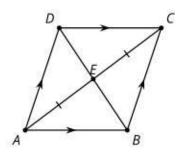


The value of *x* is 6, what is the scale factor?

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.)