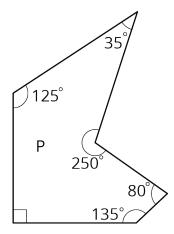
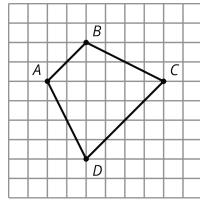


Lesson 4 Practice Problems

1. Select **all** the statements that must be true for *any* scaled copy Q of Polygon P.



- A. The side lengths are all whole numbers.
- B. The angle measures are all whole numbers.
- C. Q has exactly 1 right angle.
- D. If the scale factor between P and Q is $\frac{1}{5}$, then each side length of P is multiplied by $\frac{1}{5}$ to get the corresponding side length of Q.
- E. If the scale factor is 2, each angle in P is multiplied by 2 to get the corresponding angle in Q.
- F. Q has 2 acute angles and 3 obtuse angles.
- 2. Here is Quadrilateral ABCD.

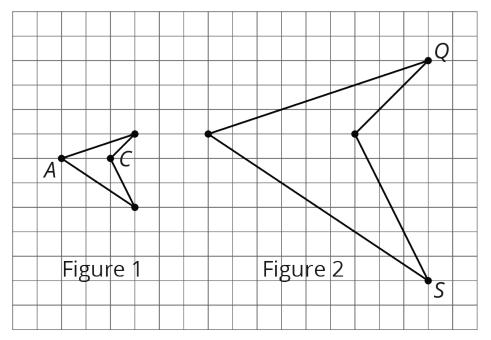


Quadrilateral PQRS is a scaled copy of Quadrilateral ABCD. Point P corresponds to A, Q to B, R to C, and S to D.

If the distance from P to R is 3 units, what is the distance from Q to S? Explain your reasoning.



3. Figure 2 is a scaled copy of Figure 1.



- a. Identify the points in Figure 2 that correspond to the points A and C in Figure 1. Label them P and R. What is the distance between P and R?
- b. Identify the points in Figure 1 that correspond to the points Q and S in Figure 2. Label them B and D. What is the distance between B and D?
- c. What is the scale factor that takes Figure 1 to Figure 2?
- d. G and H are two points on Figure 1, but they are not shown. The distance between G and H is 1. What is the distance between the corresponding points on Figure 2?
- 4. To make 1 batch of lavender paint, the ratio of cups of pink paint to cups of blue paint is 6 to 5. Find two more ratios of cups of pink paint to cups of blue paint that are equivalent to this ratio.