

Lesson 8 Practice Problems

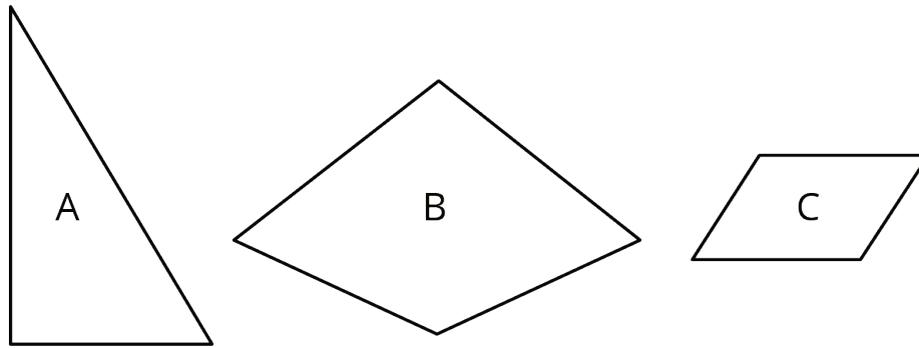
1. Rectangle A measures 12 cm by 3 cm. Rectangle B is a scaled copy of Rectangle A . Select **all** of the measurement pairs that could be the dimensions of Rectangle B .

- A. 6 cm by 1.5 cm
- B. 10 cm by 2 cm
- C. 13 cm by 4 cm
- D. 18 cm by 4.5 cm
- E. 80 cm by 20 cm

2. Rectangle A has length 12 and width 8. Rectangle B has length 15 and width 10. Rectangle C has length 30 and width 15.

- a. Is Rectangle A a scaled copy of Rectangle B ? If so, what is the scale factor?
- b. Is Rectangle B a scaled copy of Rectangle A ? If so, what is the scale factor?
- c. Explain how you know that Rectangle C is *not* a scaled copy of Rectangle B .
- d. Is Rectangle A a scaled copy of Rectangle C ? If so, what is the scale factor?

3. Here are three polygons.

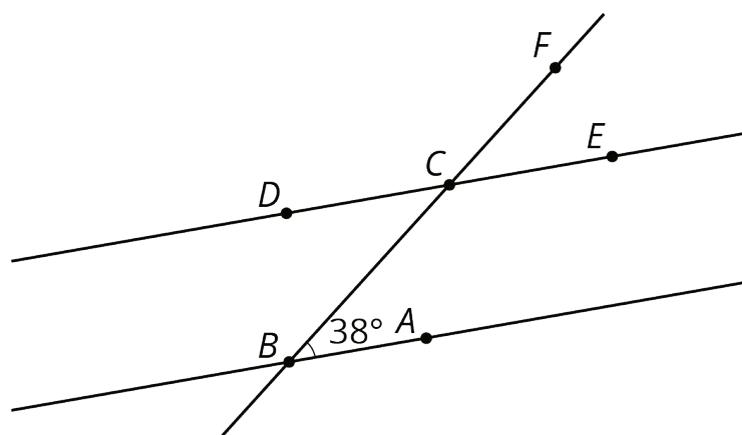


a. Draw a scaled copy of Polygon A with scale factor $\frac{1}{2}$.

b. Draw a scaled copy of Polygon B with scale factor 2.

c. Draw a scaled copy of Polygon C with scale factor $\frac{1}{4}$.

4. In the picture lines AB and CD are parallel. Find the measures of the following angles. Explain your reasoning.



- a. $\angle BCD$
- b. $\angle ECF$
- c. $\angle DCF$

(From Unit 1, Lesson 12.)

5. Which of these sets of angle measures could be the three angles in a triangle?

- A. $40^\circ, 50^\circ, 60^\circ$
- B. $50^\circ, 60^\circ, 70^\circ$
- C. $60^\circ, 70^\circ, 80^\circ$
- D. $70^\circ, 80^\circ, 90^\circ$

(From Unit 1, Lesson 13.)

6. Quadrilateral A has side lengths 3, 6, 6, and 9. Quadrilateral B is a scaled copy of A with a shortest side length equal to 2. Jada says, "Since the side lengths go down by 1 in this scaling, the perimeter goes down by 4 in total." Do you agree with Jada? Explain your reasoning.

(From Unit 2, Lesson 2.)