

Unit 2

Lesson 1 Practice Problems

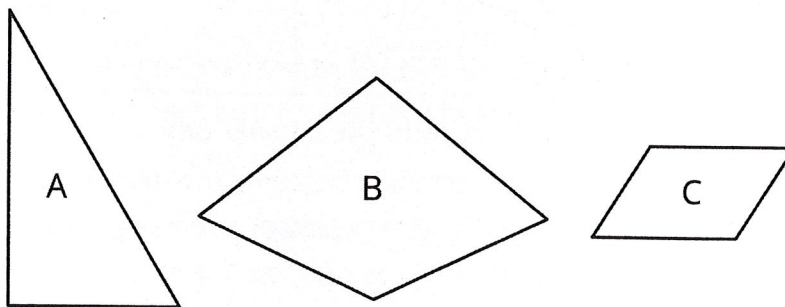
1. Rectangle *A* measures 12 cm by 3 cm. Rectangle *B* is a scaled copy of Rectangle *A*. Select **all** of the measurement pairs that could be the dimensions of Rectangle *B*.

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

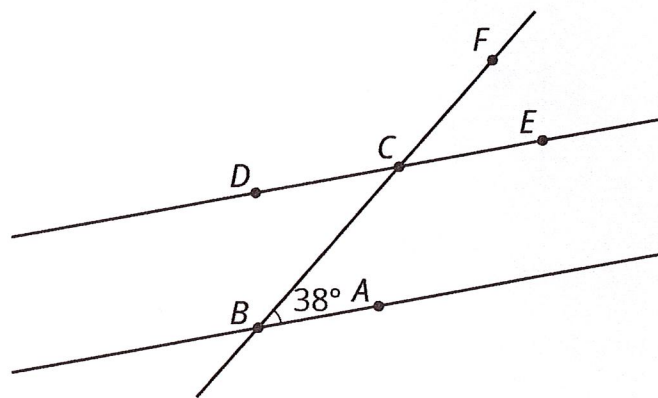
A. $40^\circ, 50^\circ, 60^\circ$

B. $50^\circ, 60^\circ, 70^\circ$

C. $60^\circ, 70^\circ, 80^\circ$

D. $70^\circ, 80^\circ, 90^\circ$

5. 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. $\angle DCF$