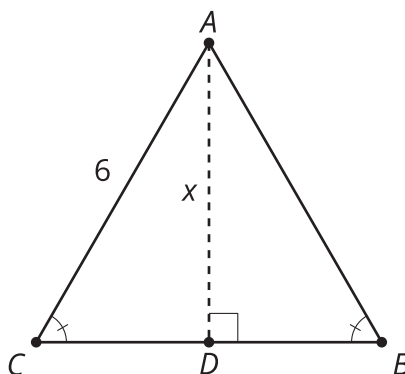
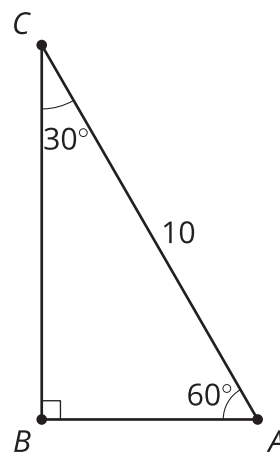


## Lesson 3 Practice Problems

1. Select **all** statements that are true about equilateral triangle  $ABC$ .

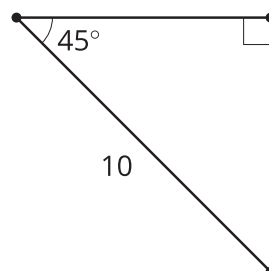


- A. Angles  $B$  and  $C$  are 60 degrees.
  - B.  $x = 3\sqrt{3}$
  - C.  $x = 6\sqrt{3}$
  - D. Triangle  $ABD$  is congruent to triangle  $ACD$ .
  - E.  $BD$  and  $CD$  are both 3 units long.
2. Find the length of each leg.



3. An equilateral triangle has a side length of 10 units. What is its area?

4. Find the lengths of the legs.



(From Unit 4, Lesson 2.)

5. A square has side length 3 units. What is the length of the diagonal?

- A. 3 units
- B.  $\frac{3}{\sqrt{2}}$  units
- C.  $3\sqrt{2}$  units
- D. 6 units

(From Unit 4, Lesson 2.)

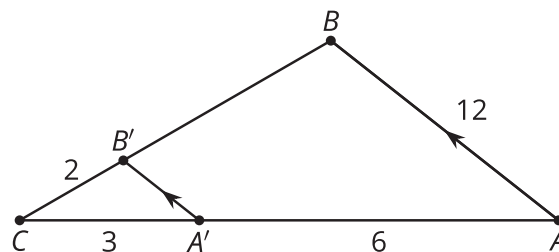
6. A step has a height of 5 inches. A ramp starts 4 feet away from the base of the step, making a  $5.9^\circ$  angle with the ground. What can you say about the angle the ramp would make with the ground if the ramp starts farther away from the step?

- A. The angle would decrease.
- B. The angle would remain the same.
- C. The angle would increase.
- D. We cannot determine anything about the angle.

(From Unit 4, Lesson 1.)

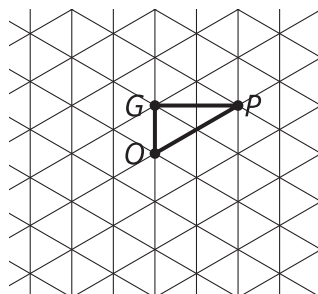
7. Segment  $A'B'$  is parallel to segment  $AB$ .

- What is the length of segment  $A'B'$ ?
- What is the length of segment  $B'B$ ?



(From Unit 3, Lesson 11.)

8. Here is triangle  $POG$ . Match the description of the rotation with the image of  $POG$  under that rotation.

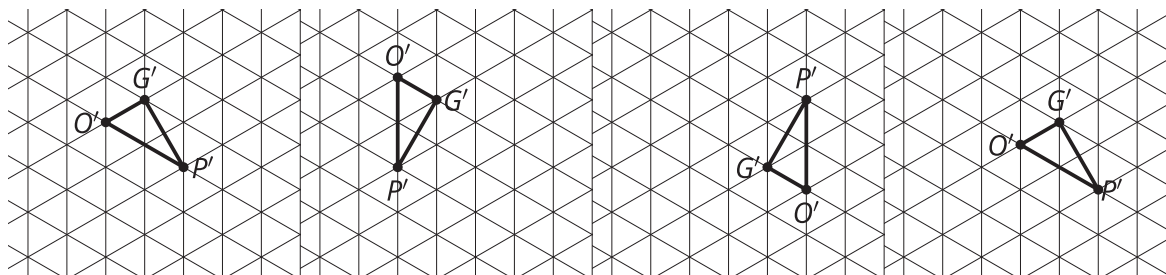


**Image 1**

**Image 2**

**Image 3**

**Image 4**



- Rotate 60 degrees counterclockwise around  $P$ .
- Rotate 60 degrees clockwise around  $O$ .
- Rotate 120 degrees clockwise around  $G$ .
- Rotate 60 degrees clockwise around  $G$ .

- Image 1
- Image 2
- Image 3
- Image 4

(From Unit 1, Lesson 13.)