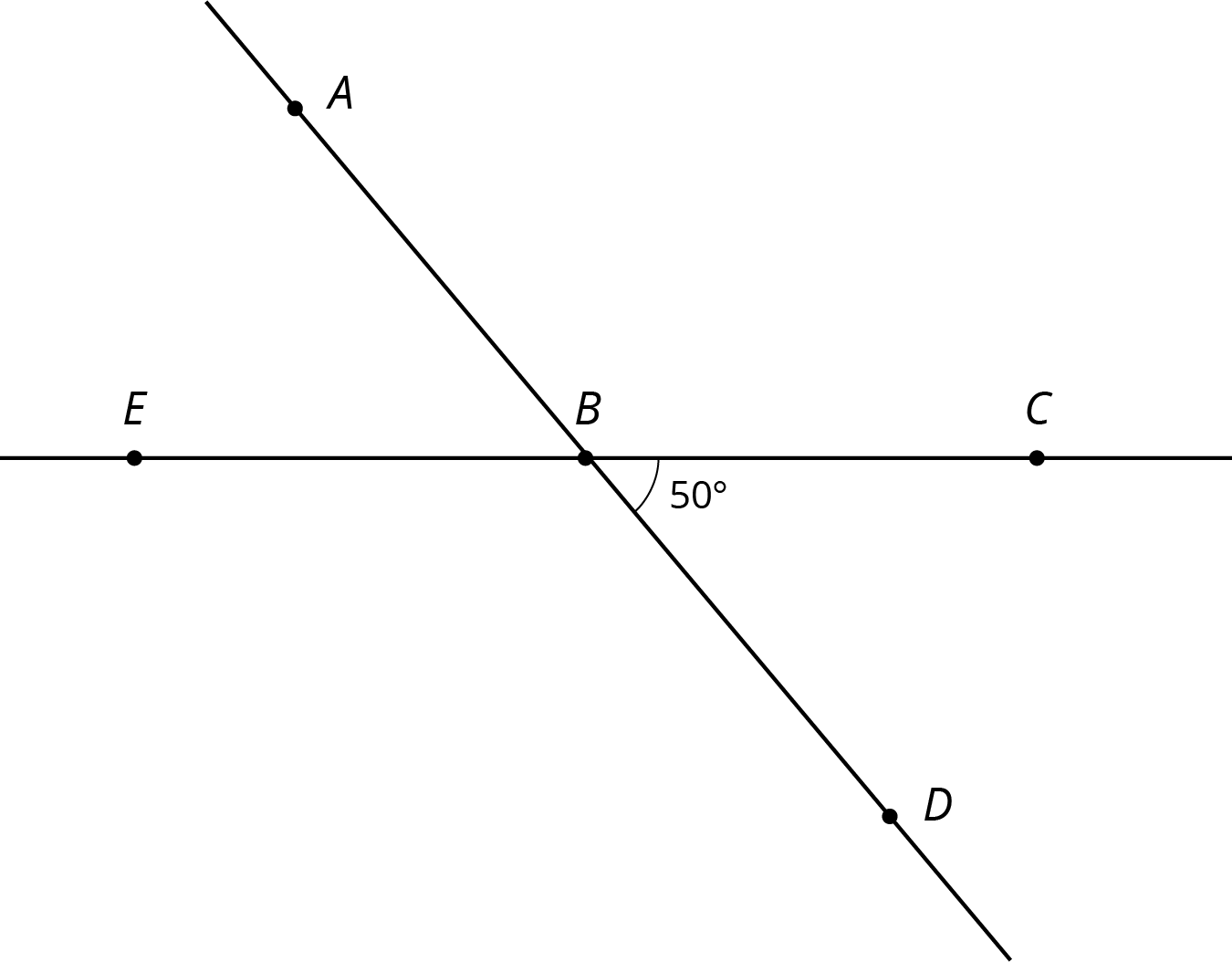
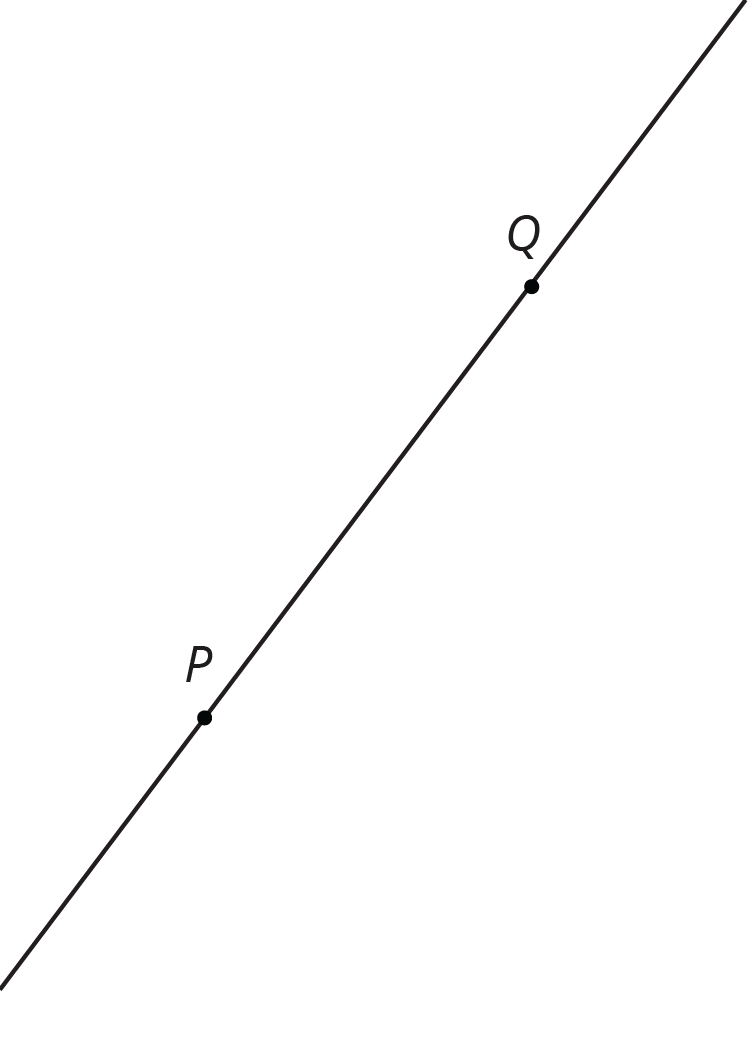
### Lesson 9 Practice Problems

* 1. Draw parallel lines and .
  2. Pick any point . Rotate 90 degrees clockwise around .
  3. Rotate line  90 degrees clockwise around .
  4. What do you notice?

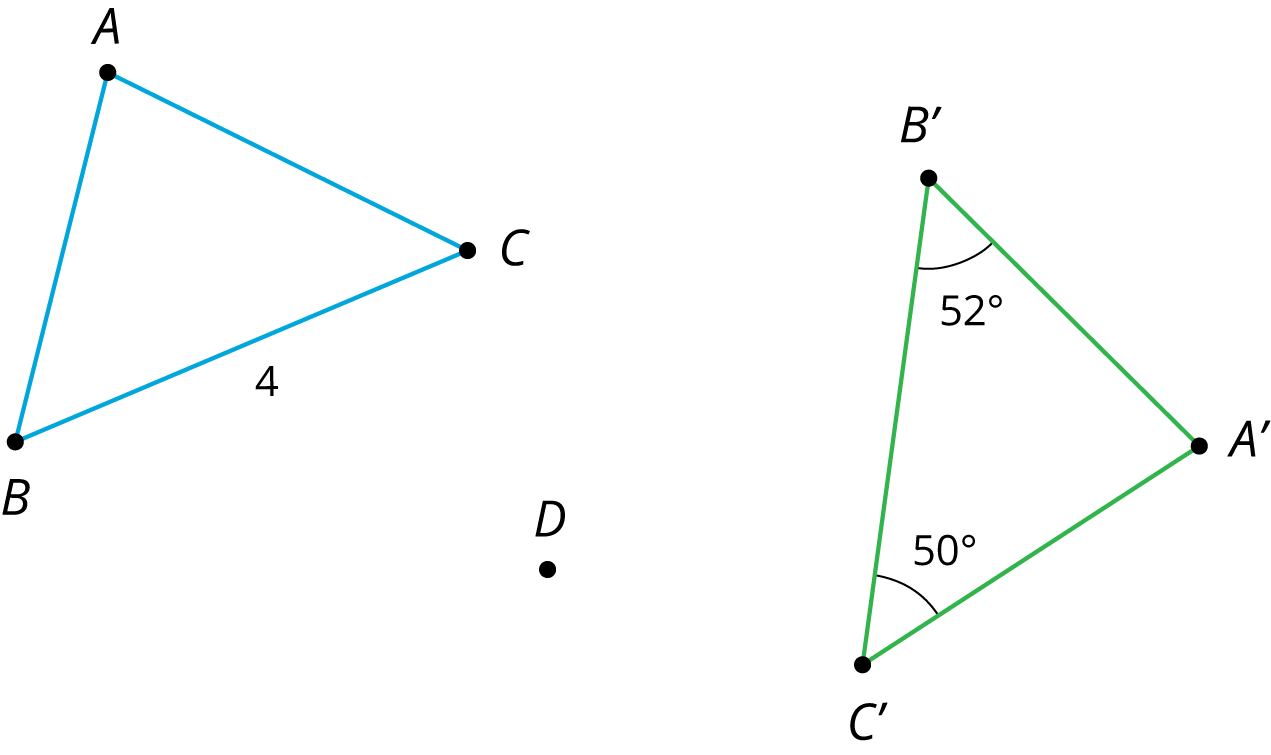
1. Use the diagram to find the measures of each angle. Explain your reasoning.

* 

1. Points and are plotted on a line.

* 
  1. Find a point so that a 180-degree rotation with center sends to and to .
  2. Is there more than one point that works for part a?

1. In the picture triangle is an image of triangle after a rotation. The center of rotation is .

* 
  1. What is the length of side ? Explain how you know.
  2. What is the measure of angle ? Explain how you know.
  3. What is the measure of angle ? Explain how you know.
* (From Unit 1, Lesson 7.)

1. The point is rotated 180 degrees counterclockwise using center . What are the coordinates of the image?

* (From Unit 1, Lesson 6.)



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