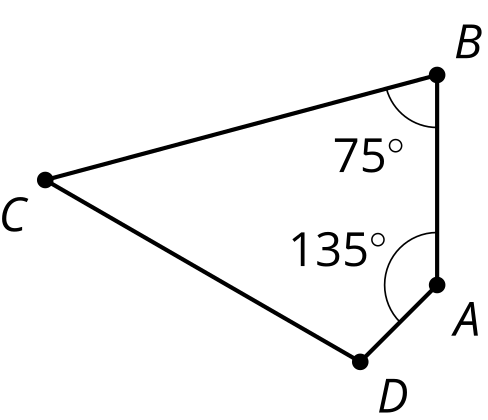
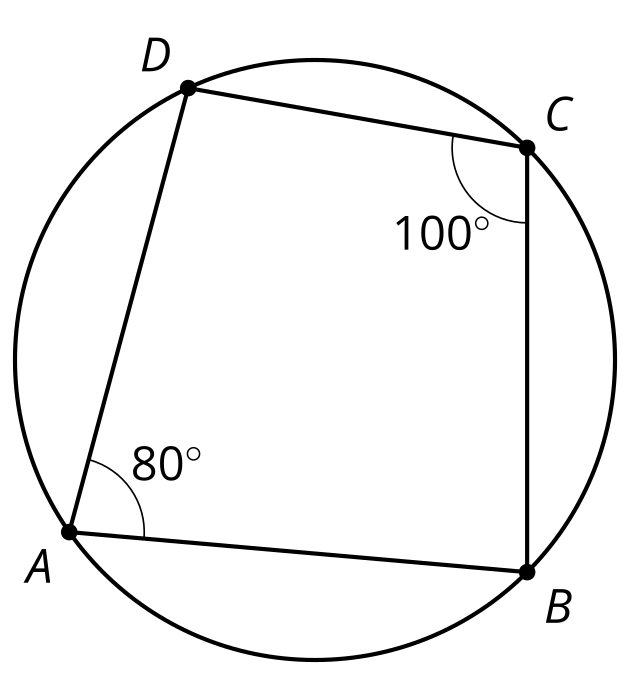
### Lesson 4 Practice Problems

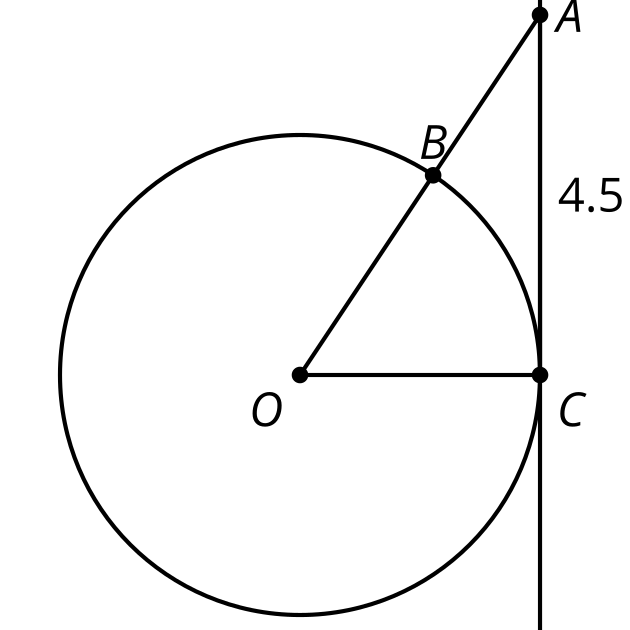
1. A quadrilateral has the given angle measures. Select **all** measurements which could come from a cyclic quadrilateral.
   1. angle is 90, angle is 90, angle is 90, and angle is 90
   2. angle is 80, angle is 80, angle is 100, and angle is 100
   3. angle is 70, angle is 110, angle is 70, and angle is 110
   4. angle is 60, angle is 50, angle is 120, and angle is 130
   5. angle is 50, angle is 40, angle is 120, and angle is 150
2. Quadrilateral is cyclic with given angle measures.
   1. What is the measure of angle ?
   2. What is the measure of angle ?

* 

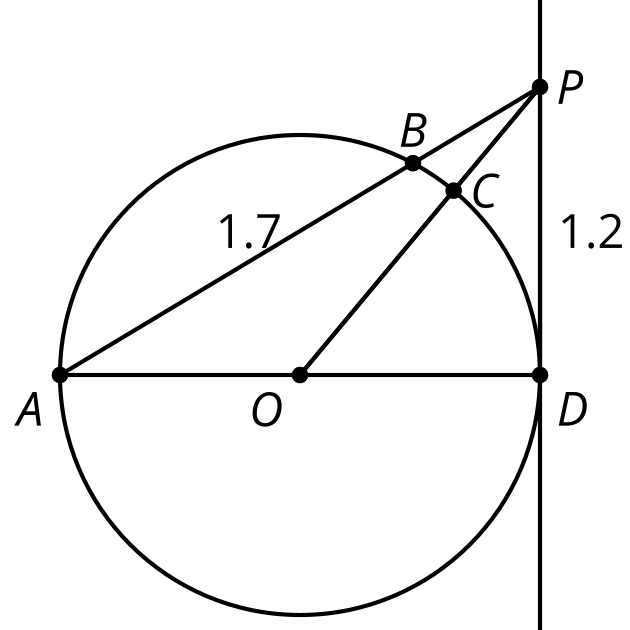
1. Lin is looking at cyclic quadrilateral . She says, “I’m not convinced that opposite angles of cyclic quadrilaterals always add up to 180 degrees. For example, in this diagram, suppose we moved point to a different spot on the circle. Angle would still measure 100 degrees, but now angle would have a different measure, and they wouldn’t add up to 180.”

* Do you agree with Lin? Explain or show your reasoning.
* 

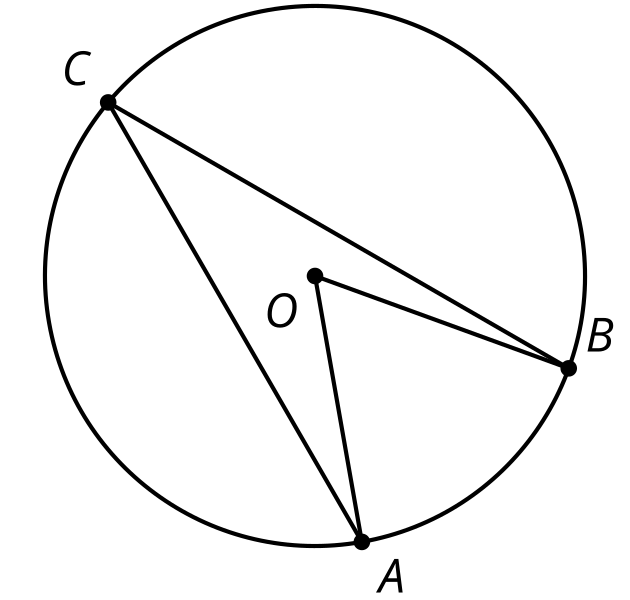
1. Line is tangent to the circle centered at with radius 3 units. The length of segment is 4.5 units. Find the length of segment .

* 
  1. units
  2. units
  3. units
  4. 26.25 units
* (From Unit 7, Lesson 3.)

1. *Technology required.* Line is tangent to a circle of radius 1 inch centered at . The length of segment is 1.2 inches. The length of segment is 1.7 inches. Han is trying to figure out if or is closer to . He uses the Pythagorean Theorem to find the length of . Then he subtracts 1 from the length of to determine how far is from point .
   1. How far is from point ?
   2. Which point is closest to ? Explain your reasoning.

* 
* (From Unit 7, Lesson 3.)

1. In the diagram, the measure of angle is 25 degrees. What is the measure of angle ?

* 
* (From Unit 7, Lesson 2.)

1. Which statement **must** be true?
   1. A diameter is a chord.
   2. A chord is a radius.
   3. A chord is a diameter.
   4. A central angle’s vertex is on the circle.

* (From Unit 7, Lesson 1.)

1. A circle and line are drawn. How many intersection points are possible? Select **all** possible answers.
   1. 0
   2. 1
   3. 2
   4. 3
   5. 4

* (From Unit 6, Lesson 13.)



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