Lesson Check
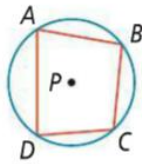
Do you know HOW?

Use the diagram for Exercises 1–3.
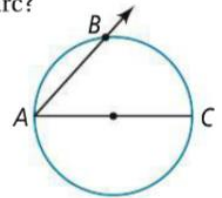
1. Which arc does $\angle A$ intercept?

2. Which angle intercepts $\widehat{ABC}$?

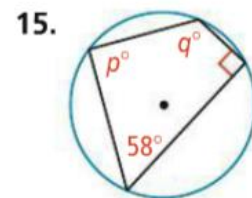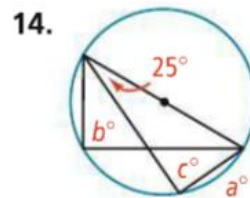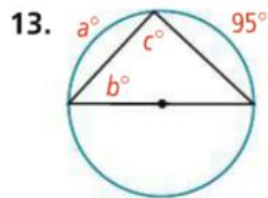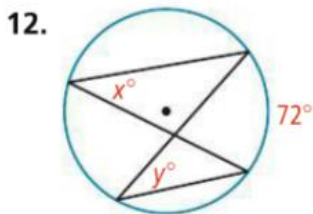3. Which angles of quadrilateral $ABCD$ are supplementary?

Do you UNDERSTAND? © MATHEMATICAL PRACTICES

© 4. **Vocabulary** What is the relationship between an inscribed angle and its intercepted arc?

© 5. **Error Analysis** A classmate says that $m\angle A = 90$. What is your classmate's error?

Find the value of each variable. For each circle, the dot represents the center. ● See Problems 1 and 2.
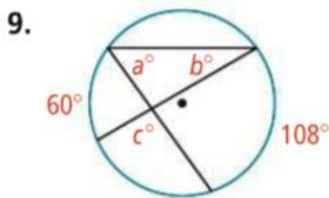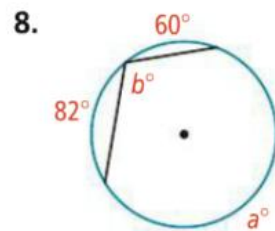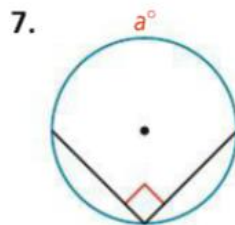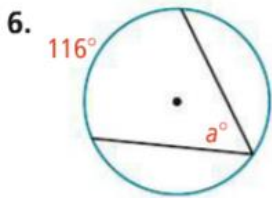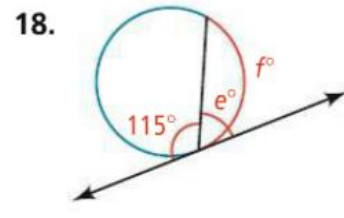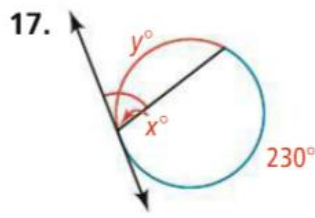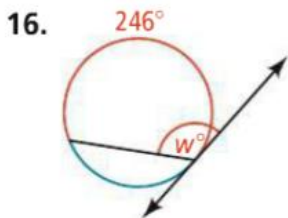
6. $116°$, $a°$

7. $a°$

8. $60°$, $b°$, $82°$, $a°$

9. $a°$, $b°$, $60°$, $c°$, $108°$

10. $b°$, $68°$, $104°$, $71°$, $a°$, $c°$

11. $c°$, $100°$, $b°$, $99°$, $d°$, $96°$, $a°$

12. $x°$, $72°$, $y°$

13. $a°$, $c°$, $95°$, $b°$

14. $25°$, $b°$, $c°$, $a°$

15. $p°$, $q°$, $58°$
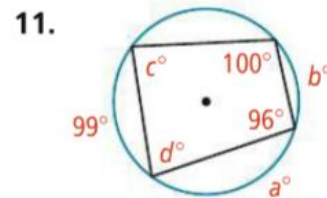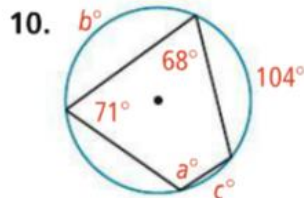
Find the value of each variable. Lines that appear to be tangent are tangent. ● See Problem 3.

16. $246°$, $w°$

17. $y°$, $x°$, $230°$

18. $f°$, $e°$, $115°$

© 19. **Writing** A parallelogram inscribed in a circle must be what kind of parallelogram? Explain.

Find each indicated measure for $\odot O$.

20. **a.** $m\widehat{BC}$

    b. $m\angle B$

    c. $m\angle C$

    d. $m\widehat{AB}$