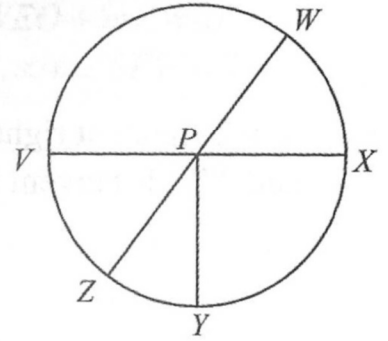


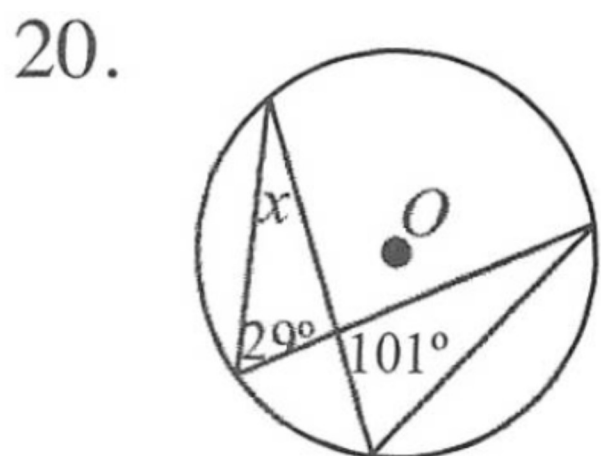
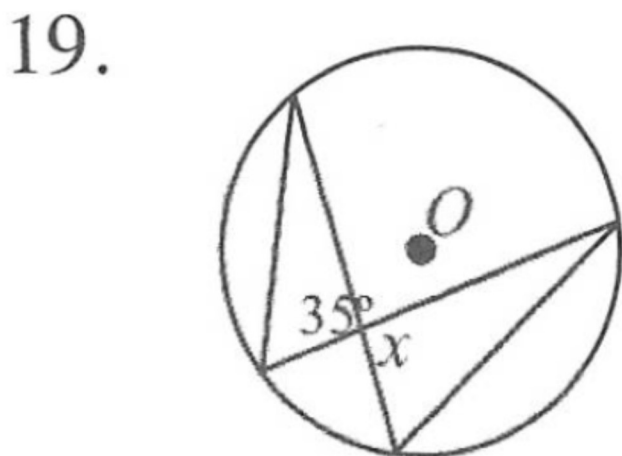
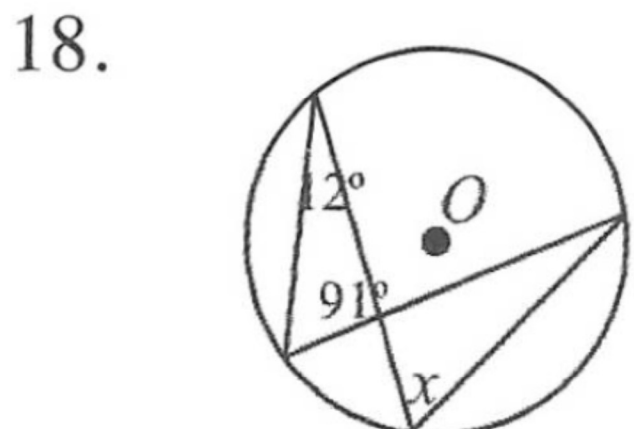
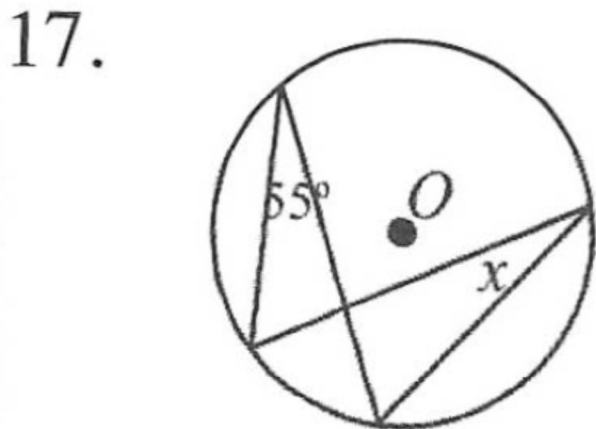
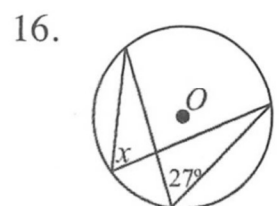
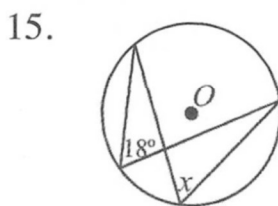
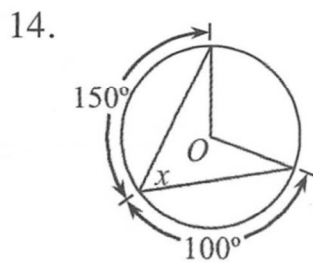
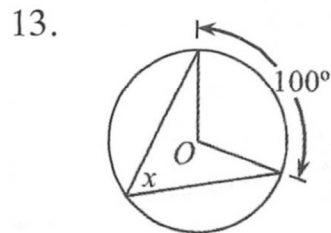
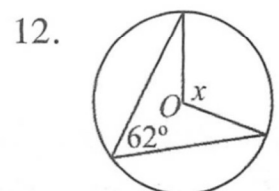
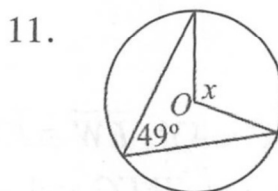
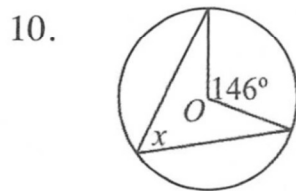
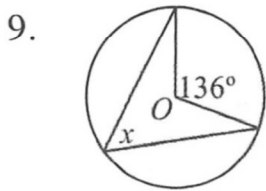
Arcs, Central Angles & Inscribed Angles

Find each measure in $\odot P$ if $m\angle WPX = 28^\circ$, $m\angle ZPY = 38^\circ$, and WZ and XV are diameters.

1. \widehat{YZ} 2. \widehat{WX} 3. $\angle VPZ$ 4. \widehat{VWX}
 5. $\angle XPY$ 6. \widehat{XY} 7. \widehat{XWY} 8. \widehat{WZX}

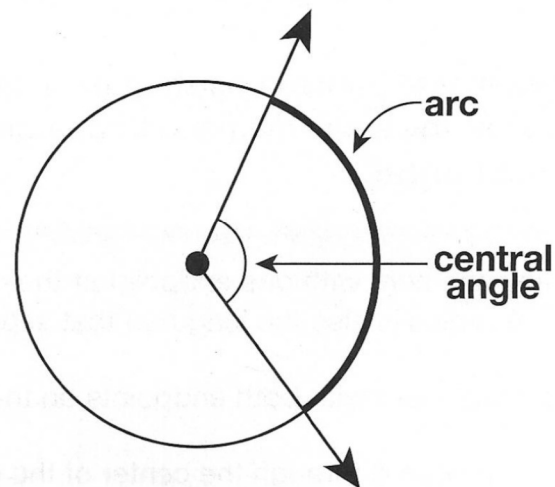


In each of the following figures, O is the center of the circle. Calculate the value of x and justify your answer.

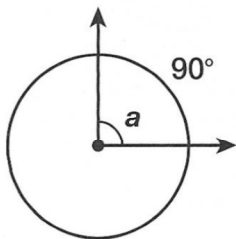


Going Around In Circles

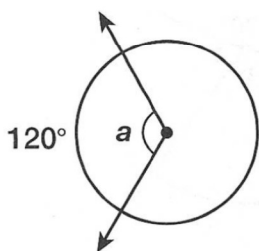
An arc is part of a circle. The part of the circle between the rays of a central angle is an arc. Like angles, arcs are measured in degrees. A whole circle is 360° of arc; a semi-circle is 180° of arc. The measure of an arc is the same as the measure of the central angle that forms it. Find the measure of $\angle a$ for each circle.



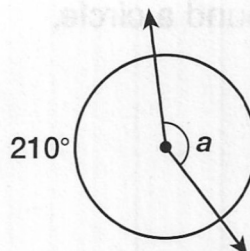
1.



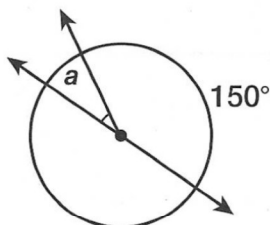
2.



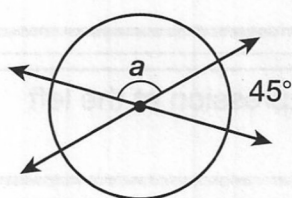
3.



4.

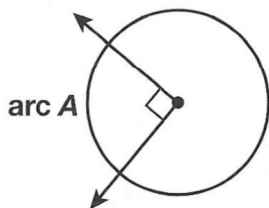


5.

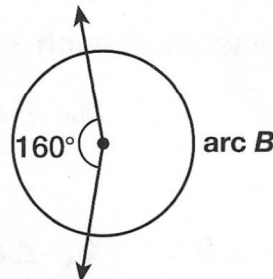


Find the measure of the indicated arc in each circle.

6.



7.



Circles and Central Angles

Use the diagram to find the measure of each angle.

For exercises 1–5, use Figure A.

Example $\angle s$
 140°

1. $m\angle k$

2. $m\angle b$

3. $m\angle s + m\angle b$

4. $m\angle k + m\angle s$

5. $m\angle k + m\angle b$

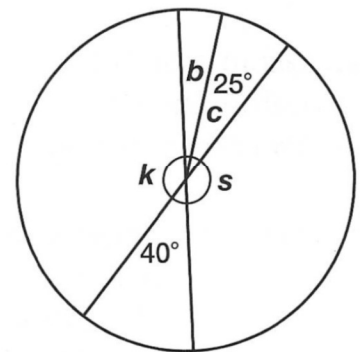


Figure A

For exercises 6–11, use Figure B.

6. $m\angle n$

7. $m\angle z$

8. $m\angle m + m\angle w$

9. $m\angle z + m\angle y$

10. $m\angle m + m\angle z$

11. $m\angle y + m\angle n$

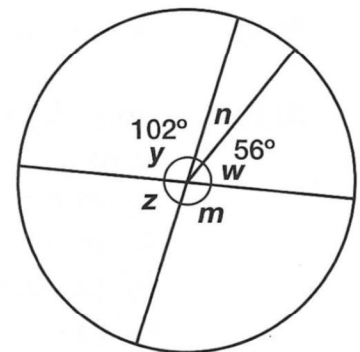


Figure B

Problem Solving • Reasoning

12. a. True or False: Every diameter is a chord, but not every chord is a diameter.

- b. True or False: Every central angle is acute.

13. Draw a triangle whose longest side is the diameter of a circle and whose other two sides are chords of that circle.