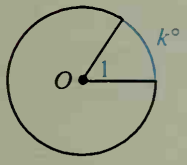
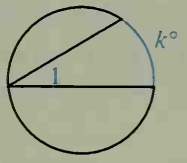
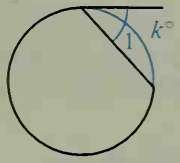
4. In the same circle or in congruent circles:
   a. Congruent minor arcs have congruent central angles.
      Congruent central angles have congruent arcs.
   b. Congruent arcs have congruent chords.
      Congruent chords have congruent arcs.
   c. Chords equally distant from the center are congruent.
      Congruent chords are equally distant from the center.
5. A diameter that is perpendicular to a chord bisects the chord and its arc.
6. If two inscribed angles intercept the same arc, then the angles are congruent.
7. An angle inscribed in a semicircle is a right angle.
8. If a quadrilateral is inscribed in a circle, then its opposite angles are supplementary.
9. Relationships expressed by formulas:



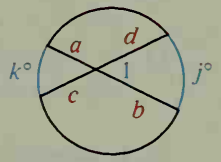
$m\angle 1 = k$



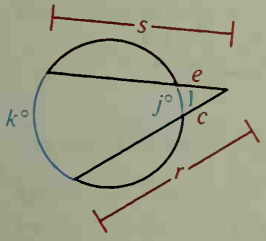
$m\angle 1 = \frac{1}{2}k$



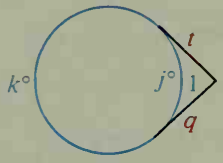
$m\angle 1 = \frac{1}{2}k$



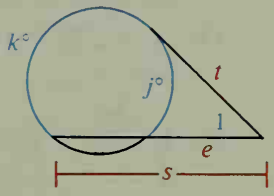
$m\angle 1 = \frac{1}{2}(k + j)$
$a \cdot b = c \cdot d$



$m\angle 1 = \frac{1}{2}(k - j)$
$s \cdot e = r \cdot c$



$m\angle 1 = \frac{1}{2}(k - j)$
$t = q$



$m\angle 1 = \frac{1}{2}(k - j)$
$s \cdot e = t^2$

Chapter Review

Points A, B, and C lie on $\odot O$.

1. $\overline{AC}$ is called a ___?___, while $\overleftrightarrow{AC}$ is called a ___?___. 9–1
2. $\overline{OB}$ is called a ___?___.
3. The best name for $\overline{AB}$ is ___?___.
4. $\triangle ABC$ is ___?___ $\odot O$.
   (inscribed in/circumscribed about)
5. $\overleftrightarrow{CD}$ intersects $\odot O$ in one point. $\overleftrightarrow{CD}$ is called a ___?___.