|  |  |
| :--- | :--- |
| Segments of Chord <br> Theorem | If two chords intersect in a <br> circle, then the products of <br> the lengths of the chord <br> segments are equal. |

1. Find the value of $x$.
a.

C.

b.

d.



| Theorem 10.16 | If two secant intersect in the exterior <br> of the circle, then the product of the <br> measure of one secant segment and its <br> external secant segment is equal to <br> the product of the measures of the <br> other secant and its external secant <br> segment. |  |
| :--- | :--- | :--- |
| Theorem 10.17 | If a tangent and a secant segment <br> intersect in the exterior of the circle, <br> then the square of the measure of the <br> tangent is equal to the product of the <br> measures of the secant segment and <br> its external secant segment. | $S K^{2}=J L \cdot J M$ |

2. Find the value of $x$ :
a.

b.

10.7 Special Segments in a Circle
f.
c.

g.

e.

h.

i.

j.

3. You are standing at point $C$, about 8 feet from a circular aquarium tank. The distance from you to a point of tangency on the tank is about 20 feet. Estimate the radius of the tank.

