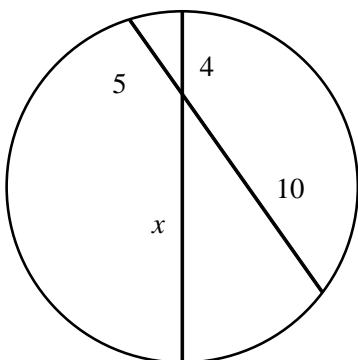
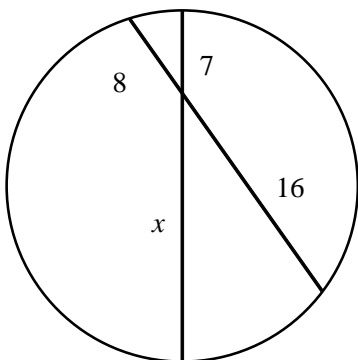


*G.G.53: Investigate, justify, and apply theorems regarding segments intersected by a circle: along two tangents from the same external point; along two secants from the same external point; along a tangent and a secant from the same external point; along two intersecting chords of a given circle*

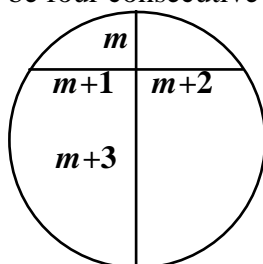
1. Find the value of  $x$ .



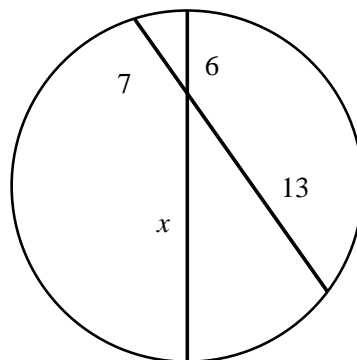
2. Find the value of  $x$ .



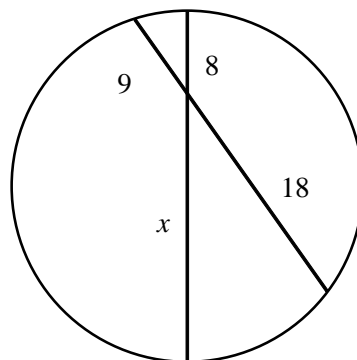
3. Show that it is not possible for the lengths of the segments of the two intersecting chords to be four consecutive integers.



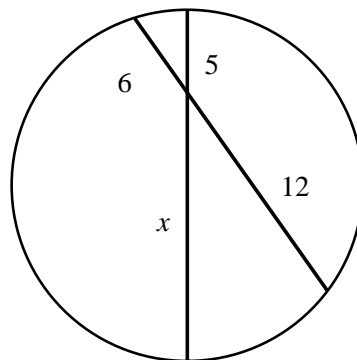
4. Find the value of  $x$ .



5. Find the value of  $x$ .



6. Find the value of  $x$ .



[1]  $12\frac{1}{2}$  \_\_\_\_\_

[2]  $18\frac{2}{7}$  \_\_\_\_\_

If  $m$  is the length of a part of one segment, the other part will have to be  $m + 3$ . Then

$m(m + 3) = (m + 1)(m + 2)$ , or  $0 = 2$ , which is

[3] false. \_\_\_\_\_

[4]  $15\frac{1}{6}$  \_\_\_\_\_

[5]  $20\frac{1}{4}$  \_\_\_\_\_

[6]  $14\frac{2}{5}$  \_\_\_\_\_