

Spiral Review:

1. Factor

a.) $x^2 + 8x + 12$

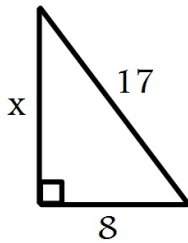
b.) $x^2 - 5x = 24$

2. FOIL

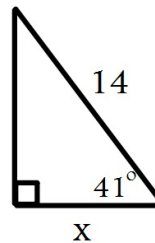
a.) $(x-1)(x+3)$

b.) $(3x+2)(x-4)$

3. Solve for x.



4. Solve for x.

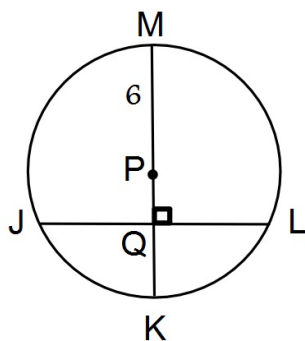


10.1 – 10.4 Review

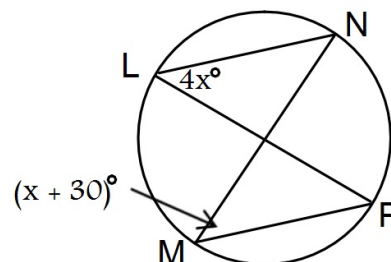
1. Draw a circle with a radius and a chord.

2. Draw a central angle.

3. $JL = 10$ Find PQ .



4. Find x .



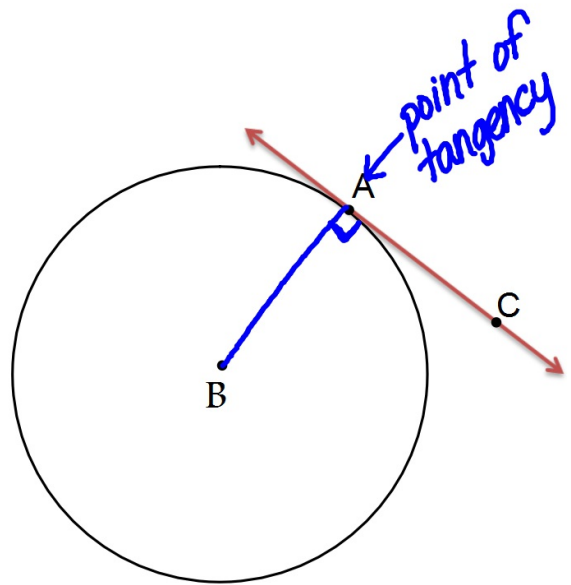
p. 732 10.5 Tangents

A tangent is a line in the same plane as a circle that intersects the circle in exactly one point, called the point of tangency.

example: \overleftrightarrow{AC} is tangent to $\odot B$

**A line is tangent to a circle if and only if it is perpendicular to a radius drawn to the point of tangency.

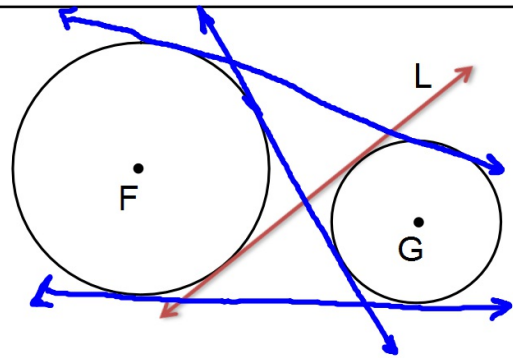
example: $\angle CAB = 90^\circ$



p. 732 10.5 Tangents

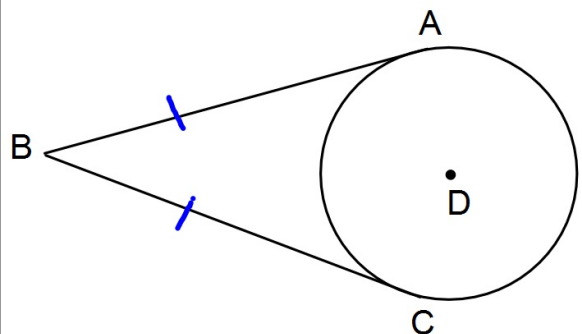
Common Tangent is a line, ray, or segment that is tangent to two circle.

example: see figure (line must touch each circle only once)



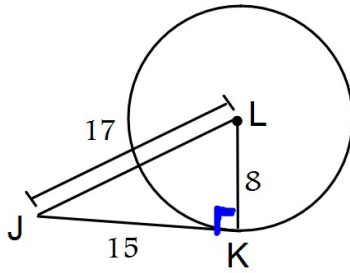
If two segments from the same exterior point are tangent to a circle, then they are congruent.

example: set equal to solve



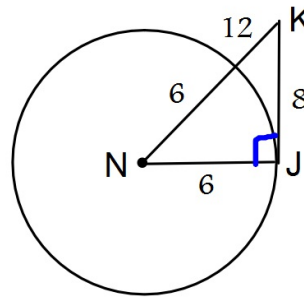
Example 1: Determine whether each \overline{JK} is tangent to the given circle.

1.



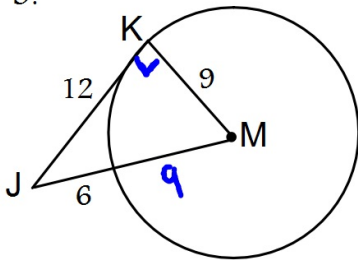
Does $a^2 + b^2 = c^2$?
 $8^2 + 15^2 = 17^2$

2.



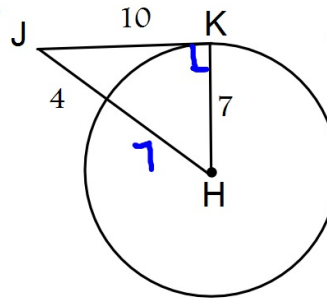
$6^2 + 8^2 = 10^2$

3.



$12^2 + 9^2 = 15^2$

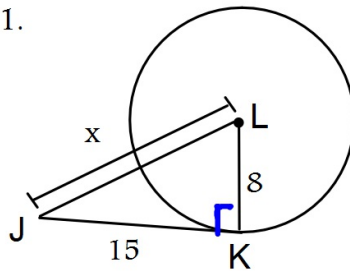
4.



$7^2 + 10^2 = 11^2$

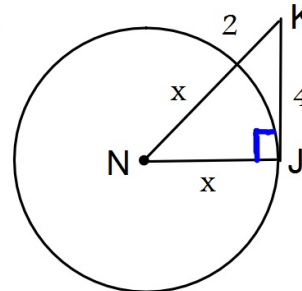
Example 2: Find x.

1.



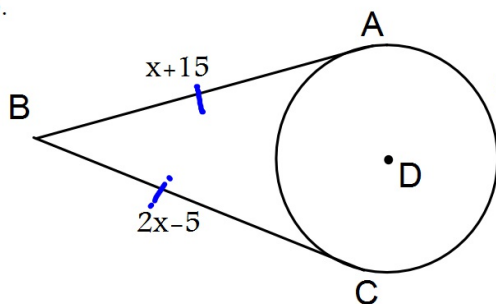
$15^2 + 8^2 = x^2$

2.



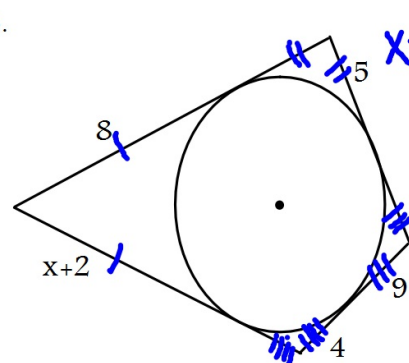
$x^2 + 4^2 = (x+2)^2$

3.



$2x-5 = x+15$

4.



$x+2 = 8$

Turn-in:
Quick Check 10.5

HW:
Wbk p. 131-132 all