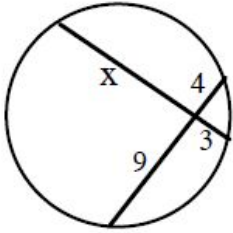


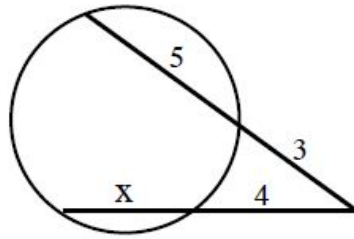
6.7 - Lengths with Secants, Tangents, and Chords

Determine the value of x .

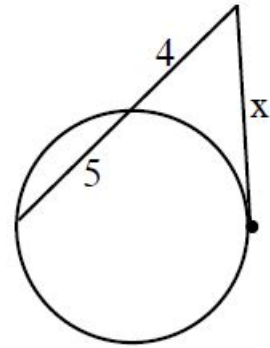
1.



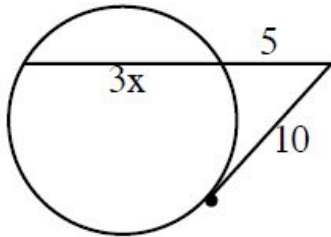
2.



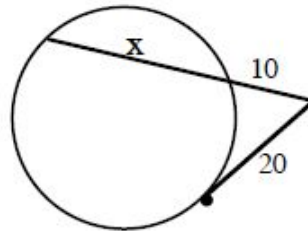
3.



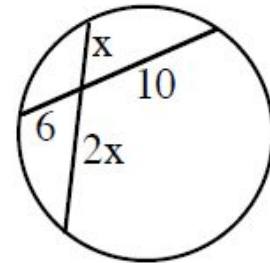
4.



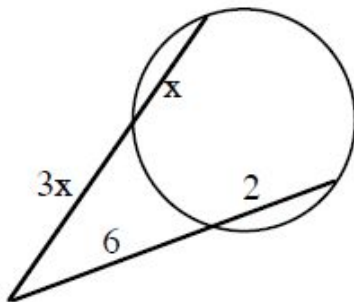
5.



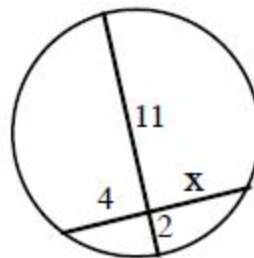
6.



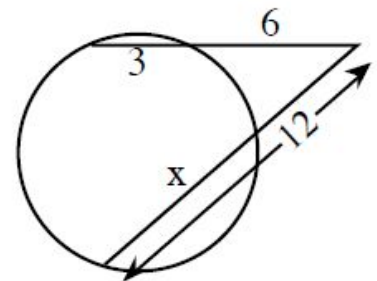
7.



8.



9.



Fun with Factoring!

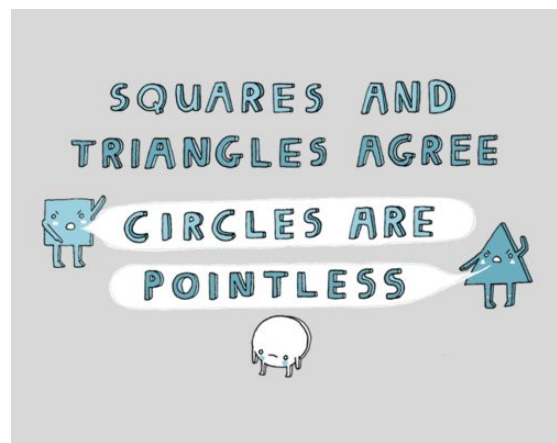
10. $3x^2 + 26x + 16$

11. $6x + 12$

12. $4x^2 - 15$

Name _____

Math 3 Unit 6: Circles



	April 10 <ul style="list-style-type: none">• Arc length and area of sector HW: worksheet 6.1	April 11 <ul style="list-style-type: none">• Equation of a circle HW: worksheet 6.2	April 12 <ul style="list-style-type: none">• Inscribed angles HW: worksheet 6.3	April 13 <ul style="list-style-type: none">• Chords HW: worksheet 6.4
April 16 <ul style="list-style-type: none">• QUIZ!!• Tangents HW: worksheet 6.5	April 17 <ul style="list-style-type: none">• Angles formed by secants, tangents, and chords HW: worksheet 6.6	April 18 <ul style="list-style-type: none">• Lengths formed by secants, tangents, and chords HW: worksheet 6.7	April 19 <ul style="list-style-type: none">• Review for test HW: finish review	April 20 <ul style="list-style-type: none">• TEST!!!

6.1 - Arc Length and Area of a Sector

Find each requested measurement.

1. radius = 7 ft, central angle = 18°
Find arc length.
2. radius = 2 in, central angle 240°
Find area of sector.
3. central angles = 130° , arc length = 14 cm
Find radius.
4. area of sector = $116\pi \text{ cm}^2$, central angle = 110°
Find diameter.
5. arc length = $8\pi \text{ cm}$, radius = 20 cm
Find central angle.
6. radius = 2 m, central angle = 103°
Find arc length.
7. area of sector = $17\pi \text{ cm}^2$, central angle = 75°
Find radius.
8. circumference = $4\pi \text{ in}$, central angle = 87°
Find area of sector.
9. Find area of sector.
10. Find arc length.

Fun With Factoring!

11. $2x^3 + 6x^2$

12. $x - 4$

13. $3x^2 + 13x - 10$

6.6 - Angles Formed By Secants, Tangents, and Chords

Solve for x.

1.

2.

3.

4.

5.

6.

7.

8.

9.

Fun With Factoring!

10. $-3x^2 - 21x - 30$

11. $5x^2 + 45$

12. $x^2 + 3x + 2$

6.5 - Tangents

Determine if line AB is tangent to the circle.

1.

2.

3.

Determine the perimeter of each polygon. Assume lines that appears tangent is tangent.

4.

5.

6.

Find the indicated side and angle measures. Assume lines that appears tangent is tangent.

7.

8.

9.

Fun with Factoring

10. $25x^2 - 1$

11. $2x^3 + 2x^2 - 4x$

12. $2x^2 - 7x - 15$

6.2 - Equation of a Circle

For #1 – 4, determine the equation of a circle with the given center and radius.

1. center: $(-7, 2)$; radius = 5 in

2. center: $(-5, -6)$; radius = 3 ft

3. center: $(0, 7)$; radius = $\sqrt{13}$ km

4. center: $(1, 14)$; radius = 36 cm

5. Find the equation of a circle with center point $(-1, 4)$ and containing the point $(5, -4)$.

For #6 – 9, determine the equation of a circle in standard form. Then determine the center and radius.

6. $x^2 + y^2 - 10x + 8y - 56 = 0$

7. $x^2 + y^2 - 14x + 4y + 35 = 0$

8. $x^2 + y^2 - 2x + 6y - 3 = 0$

9. $x^2 + y^2 + 12x - 45 = 0$

Fun with Factoring

10. $6x^2 - 5x - 25$

11. $4x^2 - 81$

12. $3x - 5$

6.3 - Inscribed Angles

Find the value of each variable. For each circle, the dot represents the center.

1.

2.

3.

4.

5.

6.

7.

8.

9.

Find each indicated measure for M .

10. $m\angle B$

11. $m\angle C$

12. $m\widehat{BC}$

13. $m\widehat{AC}$

OMG - No Fun with Factoring today!!!! You're welcome.

6.4 - Chords

Solve for the variable.

1.

2.

3.

4.

5.

6.

7.

8.

Fun With Factoring!

9. $7x^2 - 28$

10. $8x^2 + 10x - 7$

11. $3x - 9$