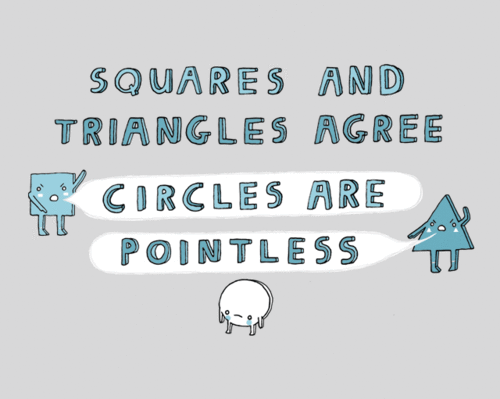
**6.7 - Lengths with Secants, Tangents, and Chords**

*Determine the value of x.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. |  | 2. |  | 3. |  |
| 4. |  | 5. |  | 6. |  |
| 7. |  | 8. |  | 9. |  |

**Fun with Factoring!**

10. 11. 12.



Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Math 3 Unit 6: Circles**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **April 10**   * Arc length and area of sector   HW: worksheet 6.1 | **April 11**   * Equation of a circle   HW: worksheet 6.2 | **April 12**   * Inscribed angles   HW: worksheet 6.3 | **April 13**   * Chords   HW: worksheet 6.4 |
| **April 16**   * QUIZ!! * Tangents   HW: worksheet 6.5 | **April 17**   * Angles formed by secants, tangents, and chords   HW: worksheet 6.6 | **April 18**   * Lengths formed by secants, tangents, and chords   HW: worksheet 6.7 | **April 19**   * Review for test   HW: finish review | **April 20**   * TEST!!! |

**6.1 - Arc Length and Area of a Sector**

*Find each requested measurement.*

1. radius = 7 ft, central angle = 18° 2. radius = 2 in, central angle 240°

Find arc length. Find area of sector.

3. central angles = 130°, arc length = 14 cm 4. area of sector = 116π cm2, central angle = 110°

Find radius. Find diameter.

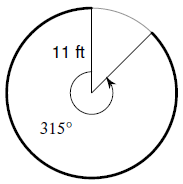
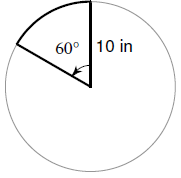
5. arc length = 8π cm, radius = 20 cm 6. radius = 2 m, central angle = 103°

Find central angle. Find arc length.

7. area of sector = 17π cm2, central angle = 75° 8. circumference = 4π in, central angle = 87°

Find radius. Find area of sector.

9. Find area of sector. 10. Find arc length.



**Fun With Factoring!**

11. 12. 13.

**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. 11. 12.

**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. 11. 12.

**6.2 - Equation of a Circle**

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

1. center: ; radius = 5 in 2. center: ; radius = 3 ft

3. center: ; radius = km 4. center: ; radius = 36 cm

5. Find the equation of a circle with center point and containing the point .

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

6. 7.

8. 9.

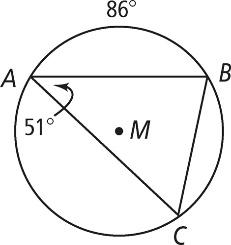
**Fun with Factoring**

10. 11. 12.

**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∠B 11. m∠C

12. 13.

**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. 10. 11.