**Unit 6 Review - Circles** NAME \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Arc Length and Area of a Sector**

*Find each requested measurement.*

1. central angle = 67°, radius = 3 m 2. Find arc length.

 Find area of sector.

3. arc length = 17 in, radius = 4 in 4. area of sector = 34 cm2, central angle = 105°

 Find central angle. Find radius.

**Equation of a Circle**

*Determine the center and radius of each circle.*

5. $(x-5)^{2}+(y+6)^{2}=9$ 6. $$(x-9)^{2}+y^{2}=60$$

7. $x^{2}+y^{2}+8x-4y+11=0$ 8. $$x^{2}+y^{2}+24x+10y+160=0$$

**Inscribed Angles**

*Solve for each indicated measurement.*

|  |  |  |
| --- | --- | --- |
| 9.  | 10.  | 11. |
| 12. | 13. Find arc MRF. |  |

**Chords**

*Solve for each indicated measurement.*

|  |  |  |
| --- | --- | --- |
| 14. Find length of AB | 15. | 16. |
| 17. | 18. |  |

**Tangents**

*Solve for the variable.*

|  |  |  |
| --- | --- | --- |
| 19. | 20. | 21. Find perimeter. |

**Angles Formed By Secants, Tangents, and Chords**

*Solve for x.*

|  |  |  |
| --- | --- | --- |
| 22. | 23. | 24. |

**Lengths Formed By Secants, Tangents, and Chords**

*Solve for x.*

|  |  |  |
| --- | --- | --- |
| 25. | 26. | 27. |

**Fun with Factoring!!**

*Factor.*

28. $4x^{2}-9$ 29. $-6g^{7}+7g^{4}$ 30. $w^{2}-5w+6$

31. $5a^{3}-10a^{2}-15a$ 32. $3x+2$ 33. $20x^{2}+13x+2$