FOM 3 Unit 6: Circles



Monday	Tuesday	Wednesday	Thursday	Friday
		November 7	November 8	November 9
		 Arcs and angles of circles 	 Lengths with circles 	 QUIZ!! Equation of a circle
		HW: worksheet 6.1	HW: worksheet 6.2	HW: worksheet 6.3
November 12	November 13	November 14	November 15	November 16
 No school - Veterans Day 	 Equation of a circle with completing the square HW: worksheet 6.4 	 Arc length and area of sector HW: worksheet 6.5 	• Review HW: finish review	• TEST!!

6.1 - Arcs and Angles Formed by Secants, Tangents, and Chord

Determine the value of x.





6.2 - Lengths with Secants, Tangents, Chords, and Radii

Determine the value of x.





6.3 - Equation of a Circle

Write the equation of the circle with the given information.

- 1. center: (4,-8)
 2. center: (-3,-2)

 radius: 5
 radius: 2
- 3. center: (5,10) radius: 4

- 4. center: origin radius: 12
- 5. center: (-11,8)
 6. center: (0,12)

 radius: 1
 radius: 14

Determine the center and radius of each circle. The graph the circle.

7. Graph: $(x - 1)^2 + (y + 3)^2 = 4$



9. Graph: $(x-1)^2 + (y-4)^2 = 9$







6.4 - Equation of a Circle with Completing the Square

Determine the equation of the circle in standard form. Then determine the center and radius of the circle.

1. $x^2 + y^2 + 4x - 16y + 52 = 0$ 2. $x^2 + y^2 + 2x + 18y + 1 = 0$

3. $x^2 + y^2 - 14x - 2y - 50 = 0$

4. $x^2 + y^2 - 10x + 10y + 48 = 0$

5. $x^2 + y^2 + 18x + 17 = 0$

6. $x^2 + y^2 + 6x - 12y + 18 = 0$

6.5 - Arc Length and Area of a Sector

 radius = 7 ft, central angle = 18° Find arc length. 2. radius = 2 in, central angle 240° Find area of sector.

3. area of sector = 30π in², radius = 6 in Find central angle

4. area of sector = 116π cm², central angle = 110° Find diameter.

- 5. central angles = 130°, arc length = 14 cm Find radius.
- 6. arc length = 8π cm, radius = 20 cm Find central angle.

7. Determine the arc length.



8. Determine the area of sector.



9. Determine the area of sector.



10. Determine the arc length.

