Name: _____ Date: _____

Fresh Math

Standard Equation Circle - Medium

Write the equation of the circle with the given center that passes through the given point.

1. center (9, -1), point (12, -8)

2. center (4, 8), point (4, 1)

3. center (-3, -6), point (-2, -7)

4. center (2, -1), point (4, -7)

5. center (5, -7), point (5, -5)

6. center (5, 8), point (0, 5)

Name: _____ Date: _____

Standard Equation Circle - Medium

Write the equation of the circle with the given center that passes through the given point.

7. center (1, -8), point (8, -14)

8. center (8, 0), point (1, -1)

9. center (3, -4), point (7, 0)

10. center (-6, 2), point (-11, 7)

11. center (6, 9), point (-1, 9)

12. center (-8, 0), point (-2, -4)

Name: _____ Date: _____

Standard Equation Circle - Medium

Write the equation of the circle with the given center that passes through the given point.

13. center (-3, 6), point (3, 2)

14. center (3, -2), point (-2, 2)

15. center (6, 0), point (13, 4)

16. center (-1, -8), point (-7, -15)

Standard Equation Circle - Medium - Answer Key

1. center (9, -1), point (12, -8)

   $(x - 9)^2 + (y + 1)^2 = 58$

2. center (4, 8), point (4, 1)

   $(x - 4)^2 + (y - 8)^2 = 49$

3. center (-3, -6), point (-2, -7)

   $(x + 3)^2 + (y + 6)^2 = 2$

4. center (2, -1), point (4, -7)

   $(x - 2)^2 + (y + 1)^2 = 40$

5. center (5, -7), point (5, -5)

   $(x - 5)^2 + (y + 7)^2 = 4$

6. center (5, 8), point (0, 5)

   $(x - 5)^2 + (y - 8)^2 = 34$

Standard Equation Circle - Medium - Answer Key

7. center (1, -8), point (8, -14)

   $(x - 1)^2 + (y + 8)^2 = 85$

8. center (8, 0), point (1, -1)

   $(x - 8)^2 + y^2 = 50$

9. center (3, -4), point (7, 0)

   $(x - 3)^2 + (y + 4)^2 = 32$

10. center (-6, 2), point (-11, 7)

    $(x + 6)^2 + (y - 2)^2 = 50$

11. center (6, 9), point (-1, 9)

    $(x - 6)^2 + (y - 9)^2 = 49$

12. center (-8, 0), point (-2, -4)

    $(x + 8)^2 + y^2 = 52$

Standard Equation Circle - Medium - Answer Key

13. center (-3, 6), point (3, 2)

    $(x + 3)^2 + (y - 6)^2 = 52$

14. center (3, -2), point (-2, 2)

    $(x - 3)^2 + (y + 2)^2 = 41$

15. center (6, 0), point (13, 4)

    $(x - 6)^2 + y^2 = 65$

16. center (-1, -8), point (-7, -15)

    $(x + 1)^2 + (y + 8)^2 = 85$