

## Lesson 9.2 Homework - Circles

I. Write the equation of the circle using the given information

1. Center (3,-4); radius 1.5
2. Endpoints of a diameter (-2,-6), (4, 3)
3. Center (2,4); (-1,3) is a point on the circle
4. Passing through (8,2), (1,9), and (1,1)
5. Passing through (0,-1), (2,-3), (4,-1)
6. Passing through (-3,-2), (-2,-3), (-4,-3)
7. Center (7,-3); tangent to the y-axis

II. Find the center and radius of each circle

1.  $x^2 + y^2 - 2y - 15 = 0$
2.  $x^2 + y^2 - 8x - 6y + 21 = 0$
3.  $4x^2 + 4y^2 - 16x - 9y - 5 = 0$