**State the formula/equation for each of the following. Identify each part of the equation.**

1. Slope 2. Point-slope form 3. Slope-intercept form

4. Distance 5. Equation of a circle 6. Midpoint

**Find each of the following for each pair of points. a) Slope, b) Midpoint, and c) Distance.**

7. (0, 0) and (3,4) 8. (2, 5) and (6,3) 9. (0, 8) and (12, 3)

**Write the equation of each graphed line in slope-intercept form.**



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10.11. 12.

Eq. = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Eq. = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Eq. = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Identify the slope of the line that is a) parallel and b) perpendicular to the given line.**

13. a) b)

14. a) b)

**Identify the center and radius for each of the following.**

15. 16**.**

ctr. = \_\_\_\_\_\_\_\_\_ r = \_\_\_\_ ctr. = \_\_\_\_\_\_\_\_\_\_ r = \_\_\_

**Write the equation of each line in slope-intercept form using the given information.**

17. 18. (3, -1) and (-6, -4) 19. (0, 4) and (2, 3)

20.  21. Horizontal line through (6, 8) 22. Vertical line through (7, 10)

23. Parallel to  24. Perpendicular to 25. Parallel to

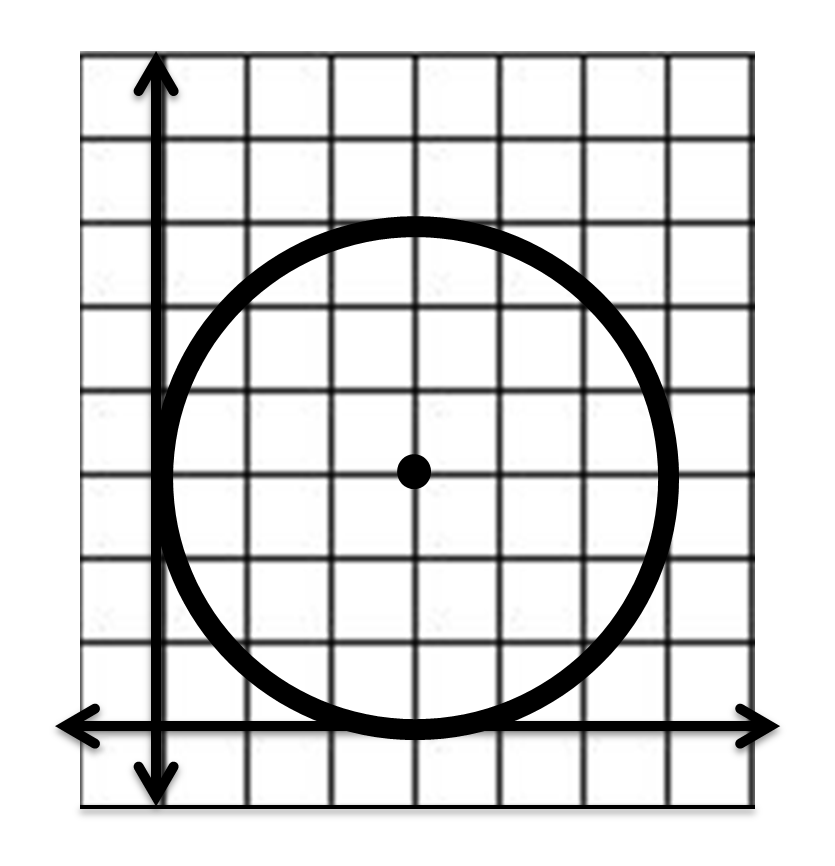
through (2, 3) through (0, 5) through (4, -4)

**Write the equation of the described circle.**

26. Center, radius  27. Center, radius  28. Center (0, 5), diameter 

29. Center (-6, 0), diameter 14 30. Tangent to the y-axis with center (3, 5)

31. Tangent to the x-axis with center (5, 2) 32. Center (-1, 3), point on the circle (-5, 11)



33.

34. Diameter with endpoints (4, 6) and (12, 12)

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