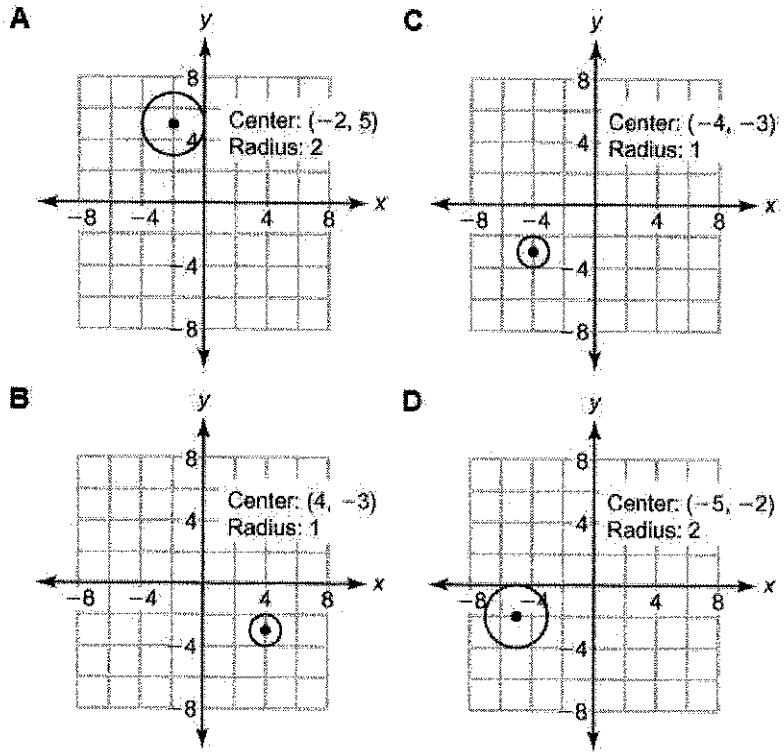
High School HS Geometry
Review of Coordinate Geometry

1. Identify the center and radius of the circle given the equation $(x - 15)^2 + (y + 9)^2 = 25$.

A. Center: (-15, 9), Radius: 5
B. Center: (15, -9), Radius: 25
C. Center: (-15, 9), Radius: 25
D. Center: (15, -9), Radius: 5

2.

Identify the center and radius for the equation $y^2 = 8x - x^2 - 24 - 6y$.



A. Graph A
B. Graph B
C. Graph C
D. Graph D

3. Identify center and radius of the following circle.

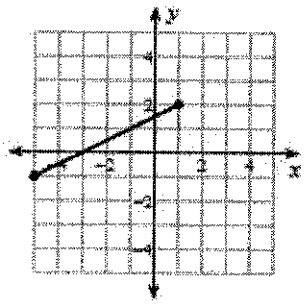
$x^2 + y^2 - 4x + 10y + 20 = 0$

A. Center: (10,20) Radius: 4
B. Center: (-4,10) Radius: 20
C. Center: (2,-5) Radius: 9
D. Center: (2, -5) Radius: 3

4. The graph of a circle has its center at (2, 3) with a radius of 10 units. Which point does NOT lie on the circle?

A. (-4, -5)
B. (8, 11)
C. (-2, 6)
D. (-4, 11)

5.



Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

A. 3
B. 6.7
C. 4.1
D. 2.2

6. Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

When the coordinate points are: (5, 4) and (-5, 6)

A. 9.4
B. 10.2
C. 3.5
D. 10

7. Find the midpoint of the line segment with the given endpoints:

(-3, -8) and (-10, 4)

A. (-6.5, -2)
B. (-17, 16)
C. (-5.5, -3)
D. (3.5, -6)

8. **Write the slope-intercept form of the equation of the line described.**

through: $(0, -4)$, parallel to $y = \frac{2}{3}x + 2$

A. $y = -\frac{2}{3}x - 4$

B. $y = \frac{2}{3}x - 4$

C. $y = -x - 4$

D. $y = -4x - \frac{2}{3}$

9. Points A(-8, 12) and B(-10, 18) are endpoints of directed line segment AB. What are the coordinates of point P that partitions AB in the ratio 3:2?

A. (-8.8, 0)
B. (-8.8, -6)
C. (-9.2, 0)
D. (-9.2, 15.6)

10. Identify the equation of the line that is perpendicular to x-4y = 16 and passes through the point (3,1).

A. y= -4x - 2
B. y = 1/4 x + 13
C. y= -4x +13
D. y = 1/4x -4

11. The coordinates of the endpoints of segment AB are A(-8, -2) and B(16, 6). Point P is on segment AB. What are the coordinates of point P, such that AP:PB is 3:5?

A. (1, 1)
B. (7, 3)
C. (9.6, 3.6)
D. (6.4, 2.8)

12. The vertices of square RSTV have coordinates R(-1, 5), S(-3, 1), T(-7, 3), and V(-5, 7). What is the perimeter of RSTV?

A. $\sqrt{20}$

B. $\sqrt{40}$

C. $4\sqrt{20}$

D. $4\sqrt{40}$