

Name: _____ Date: _____ Row: _____ Period: _____

CHAPTER 13: COORDINATE GEOMETRY

NOTES SECTION 13.1: THE DISTANCE FORMULA

QUICK REVIEW OF GRAPHS

1-3: Find the distance between the two points.

1) $(-4, -5)$ and _____

2) $(5, 8)$ and _____

3) $(2, 3)$ and _____

THEOREM: THE DISTANCE FORMULA

4-7: Find the distance between the two points.

4) $(4, 2)$ and _____

5) $(-5, -5)$ and _____

6) $(-4, -5)$ and _____

7) $(-7, -2)$ and _____

8-9: Given points A, B, and C, find AB, AC, and BC. Are A, B, and C collinear? If so, which point lies between the other two?

8) $A(6, 0)$, $B(0, 4)$, _____

9) $A(3, 8)$, $B(2, 2)$, _____

EQUATION OF A CIRCLE

10-12: Write an equation of the circle that has the given center and radius.

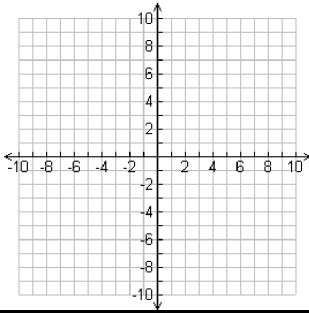
10) $C(0, 0)$ _____

11) $C(-3, -8)$ _____

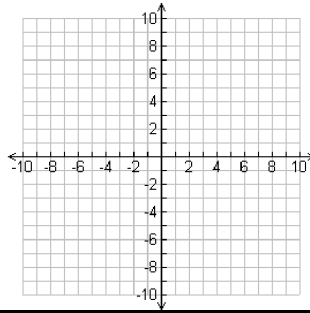
12) $C(1, -2)$ _____

13-15: Find the center and radius of each circle. Sketch the graph.

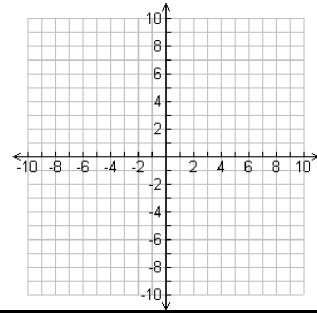
13) $(x-2)^2 + (y+4)^2 = \underline{\hspace{2cm}}$



14) $(x+7)^2 + (y+3)^2 = \underline{\hspace{2cm}}$



15) $x^2 + (y-1)^2 = \underline{\hspace{2cm}}$



NOTES SECTION 13.2: SLOPE OF A LINE

SLOPE OF A LINE

**POSITIVE
SLOPE**

**NEGATIVE
SLOPE**

UNDEFINED SLOPE

**ZERO
SLOPE**

16-19: Find the slope of the line through the points.

16) $(-1,0)$ and $\underline{\hspace{2cm}}$

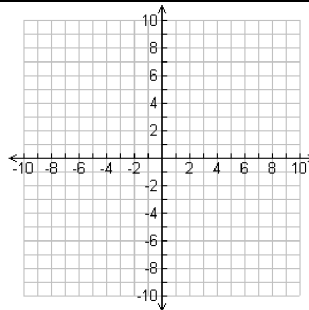
17) $(3,8)$ and $\underline{\hspace{2cm}}$

18) $(-1,-2)$ and $\underline{\hspace{2cm}}$

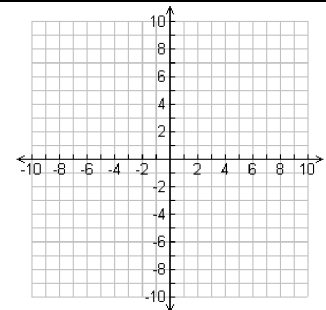
19) $(-4,-2)$ and $\underline{\hspace{2cm}}$

20-21: A point P on a line and the slope of the line are given. Sketch the line and find the coordinates of 2 other points on the line.

20) $P(3,-2)$ and $\underline{\hspace{2cm}}$



21) $P(0,2)$ and $\underline{\hspace{2cm}}$



22) A line with slope $\frac{3}{8}$ passes through the points $(-1,1)$ and $(7, \underline{\hspace{1cm}})$

23) A line with slope $-\frac{1}{3}$ passes through the points $(-5,4)$ and $(\underline{\hspace{1cm}}, -5)$