Math 1

Name_____

Final Exam Review #121321

Date_____ Period____

1) Evaluate the function $f(x) = 3x - 12$ for $x = 10$

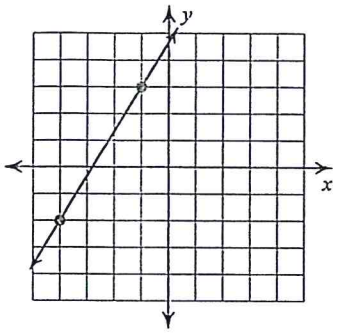
2) Find the value of x so that the function has the given value:

$f(x) = 3x + 10$; $f(x) = 31$

3) Find the intercepts: $6x - 9y = 18$

Find the slope of each line.

4)



Find the slope of the line through each pair of points.

5) $(5, 17), (14, 0)$

6) $(-15, 8), (1, 10)$

Write the slope-intercept form of the equation of the line through the given point with the given slope.

7) through: $(-2, 2)$, slope $= -\frac{3}{2}$

Write the slope-intercept form of the equation of the line through the given points.

8) through: $(0, 3)$ and $(5, 1)$

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

9) through: $(5, -1)$, parallel to $y = \frac{4}{5}x + 1$

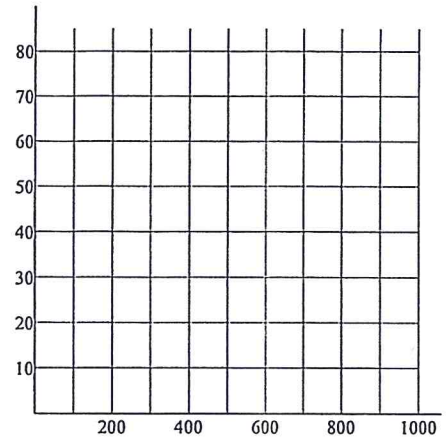
Construct a scatter plot. State if there appears to be a positive correlation, negative correlation, or no correlation.

10)

X	Y
100	20
100	23
300	51
300	52

X	Y
300	57
600	81
600	81

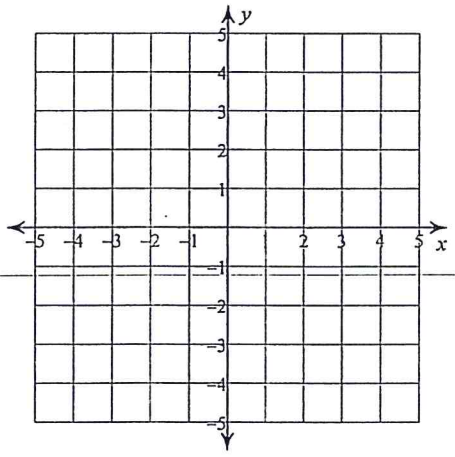
X	Y
700	85
1,000	82
1,000	85



Solve each system by graphing.

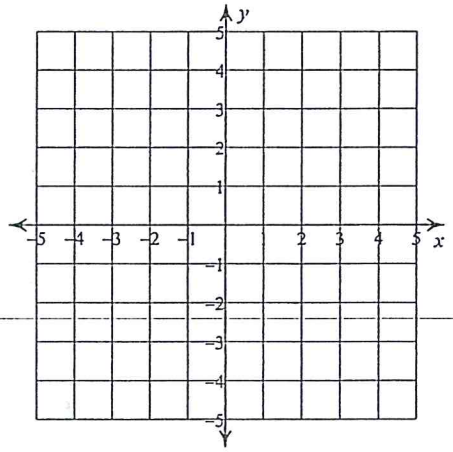
11) $y = -\frac{1}{3}x - 1$

$y = -2x + 4$



12) $y = -x - 2$

$y = x - 4$



Solve each system by substitution.

13) $x - 5y = -21$

$4x - 5y = -9$

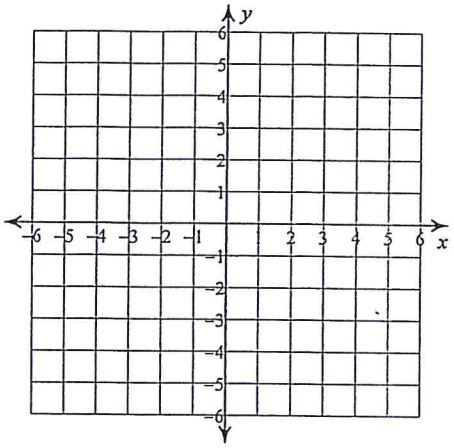
Solve each system by elimination.

14) $-6x-4y=3$
$-3x-2y=2$

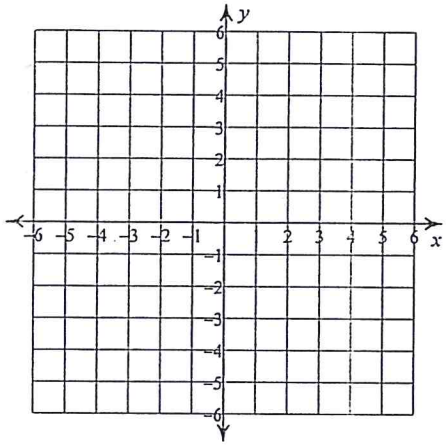
15) $3x-4y=-15$
$-9x+7y=0$

Sketch the graph of each linear inequality.

16) $y \geq \frac{3}{2}x+2$

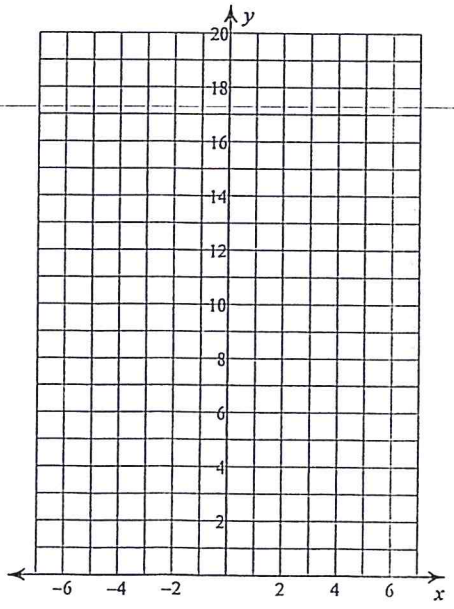


17) $y > -\frac{1}{2}x+3$



Sketch the graph of each function.

18) $y=4\cdot 2^{x}$



19) $y=4\cdot\left(\frac{1}{2}\right)^{x}$