

## Ch 4, 5, &amp; 6 Review

Date \_\_\_\_\_ Period \_\_\_\_ Table \_\_\_\_\_

- 1) What is the domain and range of the following set of relations?

$(1, 3), (-5, 0), (-4, -1), (7, -3), (0, 4)$

- 2) Is the following set of relations a function?

$(2, 3), (-1, 9), (3, 2), (-4, 3), (0, 0)$

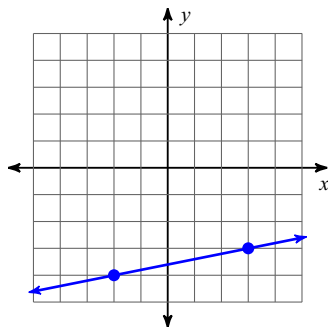
- 3) The following ordered pairs represent a function. What rule represents the function?

$(1, 3), (2, 6), (3, 9), (4, 12)$

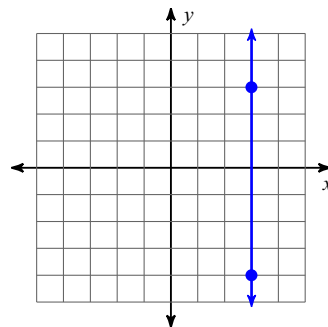
- A)  $y = x$       B)  $y = 3x$   
C)                D)  $y = x + 2$

**Find the slope of each line.**

4)



5)



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

6)  $(-6, -1), (10, 13)$

7)  $(19, -7), (-11, -7)$

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

8) through:  $(-2, -2)$ , slope  $= 2$

9) through:  $(3, -1)$ , slope  $= -\frac{4}{3}$

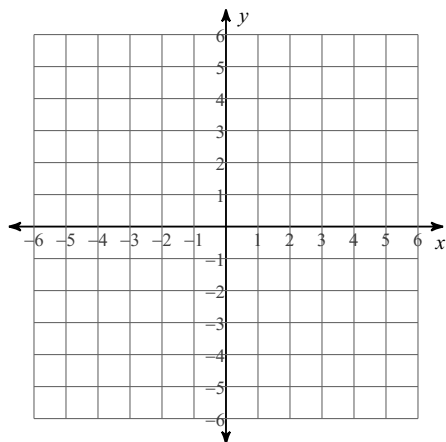
**Write the slope-intercept form of the equation of the line through the given points.**

10) through:  $(-2, 4)$  and  $(0, 3)$

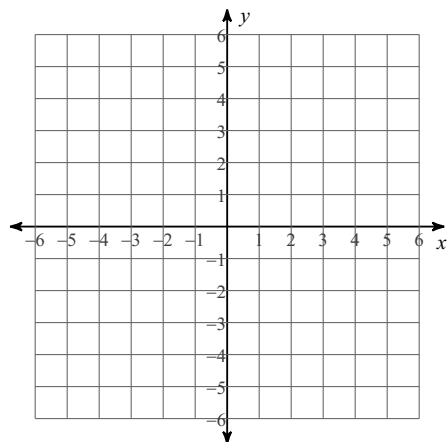
11) through:  $(0, -2)$  and  $(1, 3)$

**Sketch the graph of each line.**

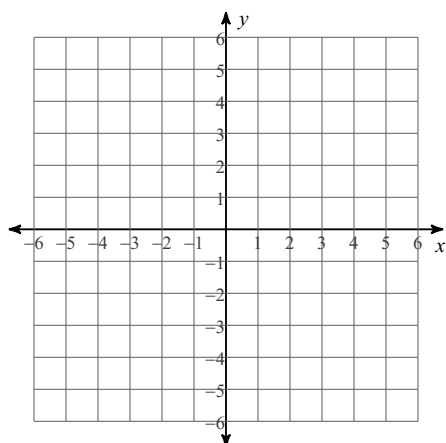
12)  $y = -x - 2$



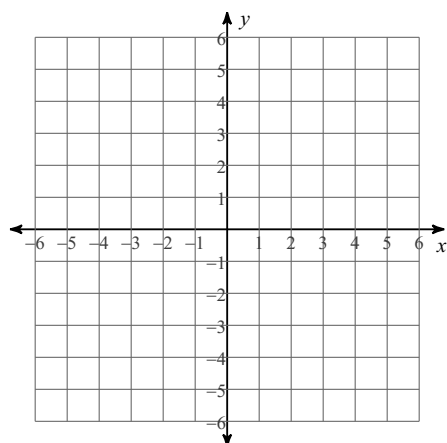
13)  $x = -4$



14)  $2x - 5y = -20$

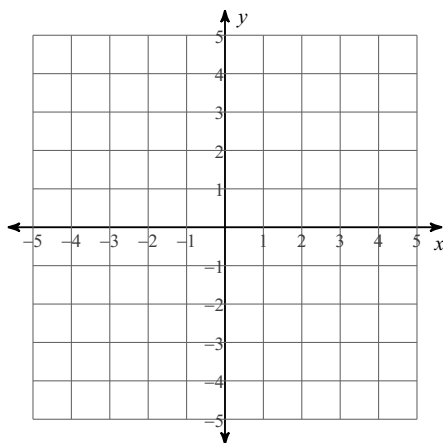


15)  $2x + y = -2$

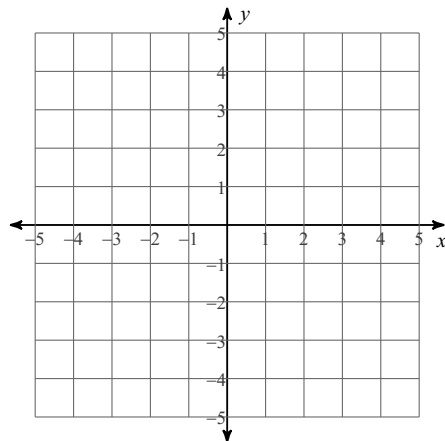


**Solve each system by graphing.**

16)  $y = -\frac{1}{3}x - 2$   
 $y = -2x + 3$



17)  $x + y = -2$   
 $x + 4y = 4$



**Solve each system by substitution.**

18)  $y = -4x + 9$   
 $-8x - y = -17$

19)  $7x + y = -17$   
 $4x + 4y = -20$

**Solve each system by elimination.**

20)  $10x + y = 2$   
 $-7x - y = 1$

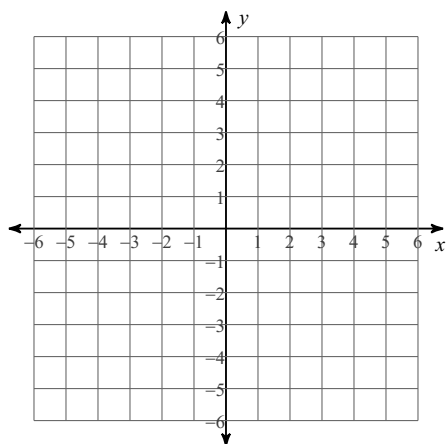
21)  $-10x - 4y = -14$   
 $-10x - 3y = -8$

22)  $-15x - 10y = 5$   
 $5x - 8y = 21$

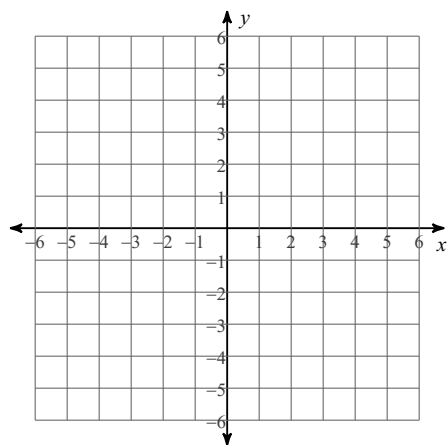
23)  $2x - 7y = -20$   
 $3x + 5y = -30$

**Sketch the graph of each linear inequality.**

24)  $x > -1$

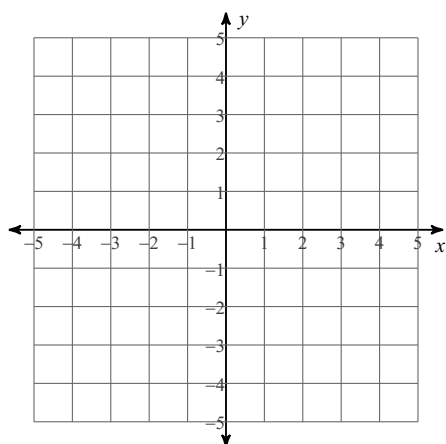


25)  $y \leq \frac{1}{5}x + 1$

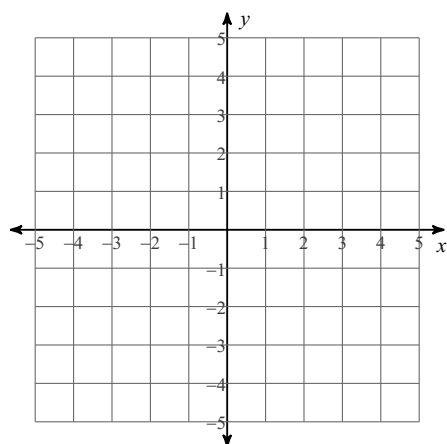


**Sketch the solution to each system of inequalities.**

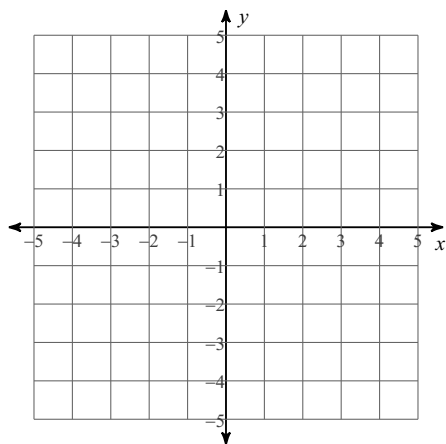
26)  $y < -x + 2$   
 $y \leq \frac{1}{3}x - 2$



27)  $y \geq -\frac{3}{2}x + 2$   
 $y \geq -1$



28)  $y \geq -2x + 3$   
 $y \geq 4x - 3$



29)  $y \leq -2x + 3$   
 $y > 4x - 3$

