

Name: \_\_\_\_\_

Solve each equation:

1.  $10 - 3(x + 4) = 13$

2.  $\frac{x}{3} - 2 = \frac{7}{4}$

3.  $-4(2a + 1) = -3(4a - 4)$

4.  $4x + 6 = 6x - 4(x - 7)$

5.  $W = \frac{b-a}{xy}$  solve for b

6.  $4(g - h) = k$  solve for h

7.  $|x + 3| = 15$

Solve each inequality and graph the solution set

8.  $2x + 8 \geq 6x - 20$



9.  $2(x + 6) - 6x > 32$

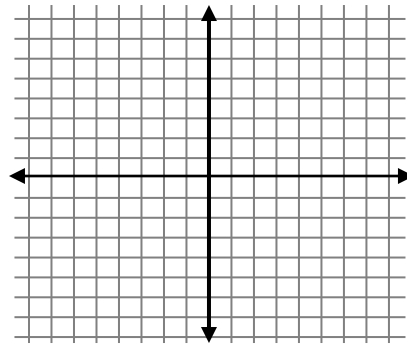


10.  $5z + 3 < -7$  or  
 $-2z - 6 > -8$

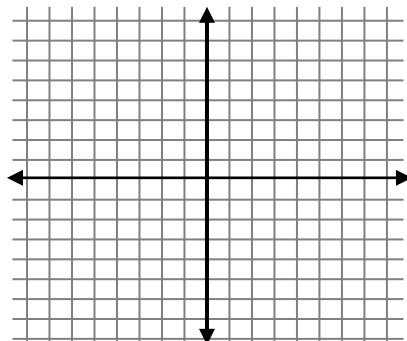


Graph each line:

11.  $y = \frac{-1}{3}x + 2$

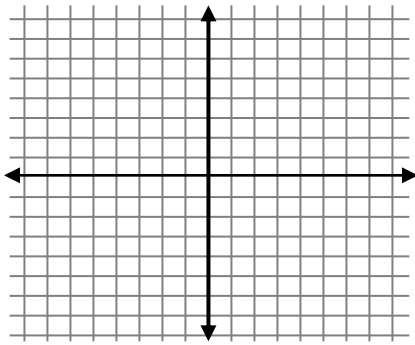


12.  $y + 3 = 4(x - 2)$



13.  $x - 4y = 8$

x-int = \_\_\_\_\_ y-int = \_\_\_\_\_



Find the equation of the line in slope intercept form through the given points

14. (3, 2) and (5, 10)

Find the equation of the line in point slope form through the given points

15. (-2, 5) and (3, -1)

Convert to standard form:

16.  $y = -x + 3$

17.  $y = -3x + 5$

a. Find a parallel line through (2, -3)

b. Find a perpendicular line through (2, -3)

18.  $\{(-4, 8), (0, 5), (3, 8), (-1, -3)\}$

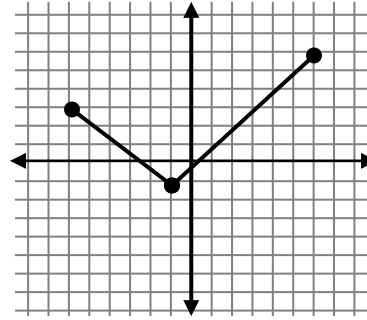
Function? (yes or no) \_\_\_\_\_

One-to-one? (yes or no) \_\_\_\_\_

Domain: \_\_\_\_\_

Range: \_\_\_\_\_

19.



Domain: \_\_\_\_\_

Range: \_\_\_\_\_

20.  $f(x) = 2(x + 3) - 4$

Find  $f(-8)$

Find a linear function for the table

21.

x	1	2	3	4
y	7	2	-3	-8

22. -11, -16, -21, -26, ...

Explicit:  $a_n =$  \_\_\_\_\_

Recursive:  $a_1 =$  \_\_\_\_\_

$a_n =$  \_\_\_\_\_

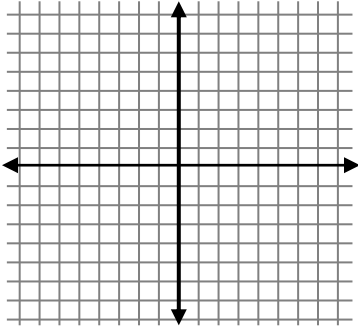
Find the indicated value in each arithmetic sequence:

23. -13, -7, -1, 5, ...

Find  $a_{21} =$  \_\_\_\_\_

Solve by graphing

$$\begin{aligned} 24. \quad x - 2y &= 8 \\ y &= -2x + 1 \end{aligned}$$



Solution: \_\_\_\_\_

Solve by Substitution

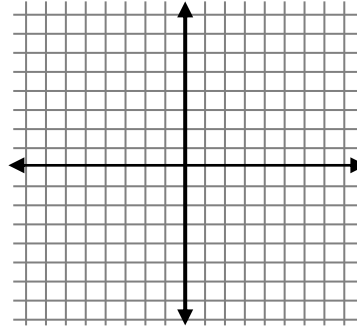
$$\begin{aligned} 25. \quad 7x + 2y &= -7 \\ y &= 5x + 5 \end{aligned}$$

Solve by Elimination

$$\begin{aligned} 26. \quad 2x - 7y &= -2 \\ 6x - 3y &= 30 \end{aligned}$$

Graph solution

$$27. \quad 2x + 5y < 10$$



$$28. \quad y > \frac{3}{2}x - 4$$

$$3x + 4y < 12$$

