Alg. 1
Unit 2 Study Guide

Name: _____

Complete the following information for Unit 2.

Solve the following.

1) $-10 = 2v + 1 + 3$

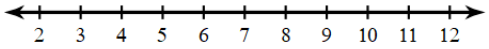
2) $27 - 2a = -6(1 + 6a) - 1$

3) $kx = w - v$, for x

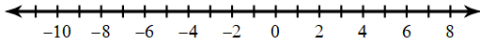
4) $g = \frac{ab}{c}$, for a

Solve and graph the following.

5) $-216 > 8(-4x + 1)$



6) $-8 + x \leq -15$ *or* $\frac{x}{4} > 1$



Solve the following equations for slope-intercept form.

7) $2y = 4x + 8$

8) $-3x + y = 10$

9) $7x - 2y = 12$

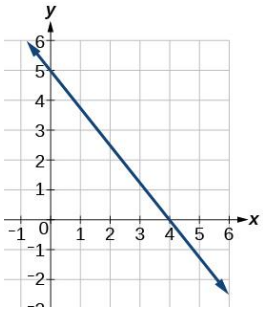
10) $5x - y = 10$

Identify the constant rate of change.

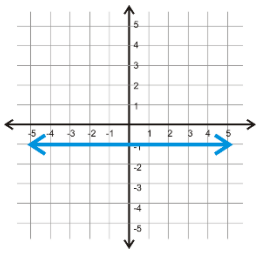
11) $(5, -1), (10, -2)$

12) $(0, -4), (2, -4)$

13)



14)



Write the slope-intercept form given the information in each problem.

15) $m = -\frac{1}{2}; b = 8$

16) $m = -1; (4, 3)$

17) $(0, -6), (4, -12)$

Identify the parallel lines.

18) Which two lines are parallel?

a) $y = 3x - 2$

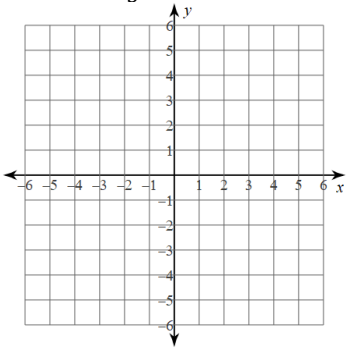
b) $-3x + 2y = 2$

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

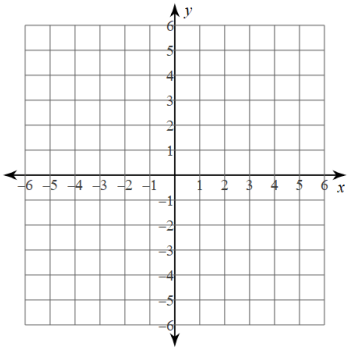
d) $-6x + 2y = 10$

Graph the following.

19) $y = -\frac{7}{3}x + 2$



20) $3x + 4y \leq 4$

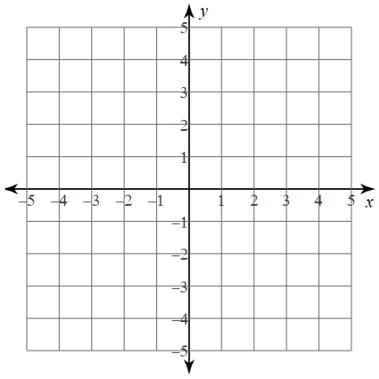


Alg. 1
Unit 2 Study Guide

Name: _____

Solve the systems of equations.

21) $\begin{cases} y = -x - 3 \\ 6x + y = 2 \end{cases}$



22) $\begin{cases} y = -4x - 1 \\ 8x + 2y = -2 \end{cases}$

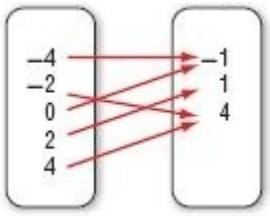
23) $\begin{cases} -3x + 4y = -23 \\ 7x + 12y = 11 \end{cases}$

24) $\begin{cases} 5x - 7y = 5 \\ y = 7x - 7 \end{cases}$

25) $\begin{cases} 7x - 8y = -21 \\ 10x - 8y = -6 \end{cases}$

Identify the following as a Function or Not a Function.

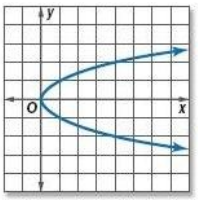
26)



27)

Domain	Range
2	6
5	7
6	9
6	10

28)



29) (4,2)(3,2)(0,4)

Find the next three terms of the arithmetic sequence.

30) $6, -1, -8, -15, \ldots$

31) $-2, 198, 398, 598, \ldots.$

Write the explicit formula for the nth term.

32) $20, 23, 26, 29, \ldots.$

33) $-18, -21, -24, \ldots$

Find the given term of the arithmetic sequence.

34) $-29, -33, -37, -41, \ldots.$ Find a_{32}

35) $-25, 175, 375, 575, \ldots.$ Find a_{40}