

## 1-23 Semester Exam Review

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

**Solve the equation for the variable in parenthesis.**

1)  $Pv = nrT$  (n)

2)  $C = 2\pi r$  (r)

3)  $3x + 2y = d$  (y)

4)  $\frac{2x + y}{j} = f$  (y)

5)  $5i - 3j = -9m$  (j)

6)  $3r + 4 = \frac{2q + 3}{3}$  (q)

**Solve each equation.**

7)  $-14 = p - 17$

8)  $k + 20 = 37$

9)  $380 = 19m$

10)  $9 = \frac{x}{8}$

11)  $2 + 8n = -70$

12)  $\frac{6 + v}{-3} = 4$

13)  $\frac{n - 10}{-5} = -2$

14)  $1 = -1 + \frac{p}{6}$

$$15) 6(2r - 4) = -120$$

$$16) 2(7 - 6a) = 98$$

$$17) -6k - 13 = -3(2k + 4)$$

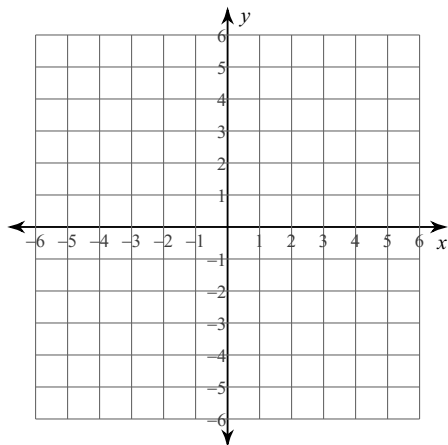
$$18) -8 - (-3 - 5x) = 8x - 20$$

$$19) 6(-1 - 3x) = -2(3 + 9x)$$

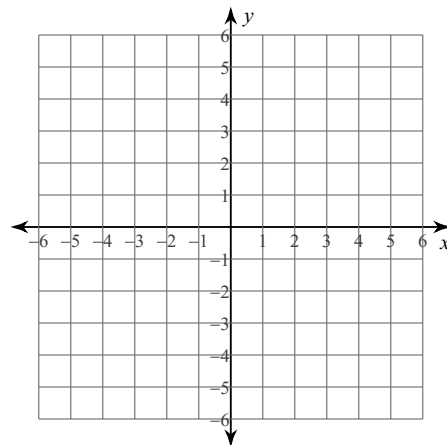
$$20) 8(-n + 6) = 8(n + 4)$$

**Sketch the graph of each line.**

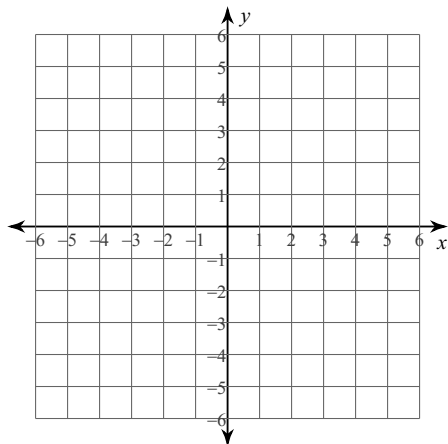
$$21) x = -5$$



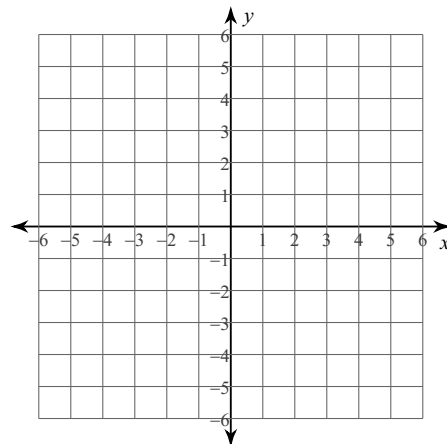
$$22) y = -6x + 5$$



$$23) 6x - y = 2$$

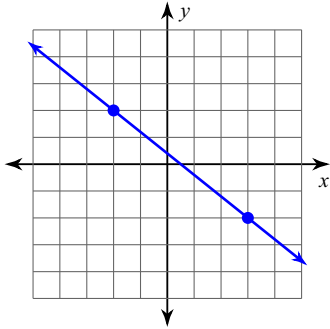


$$24) 3x + 4y = 8$$

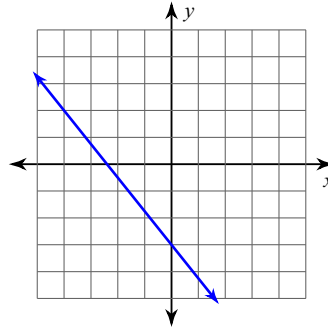


**Find the slope of each line.**

25)



26)



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

27)  $(-3, -1), (1, 9)$

28)  $(16, 3), (10, 10)$

29)  $(8, 11), (13, 4)$

30)  $(2, -18), (-19, 1)$

**Find the slope of each line.**

31)  $y = \frac{2}{5}x - 3$

32)  $4x + 3y = -6$

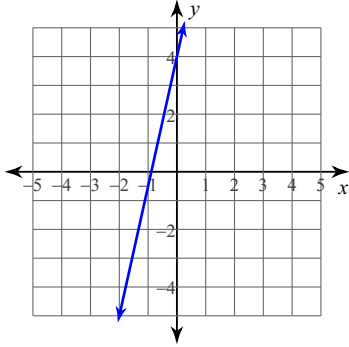
**Write the slope-intercept form of the equation of each line given the slope and y-intercept.**

33) Slope = 0, y-intercept = -3

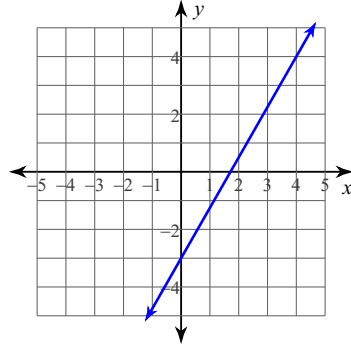
34) Slope =  $-\frac{3}{2}$ , y-intercept = 5

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

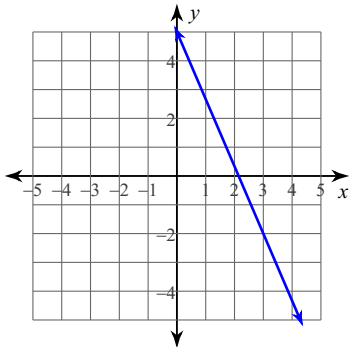
35)



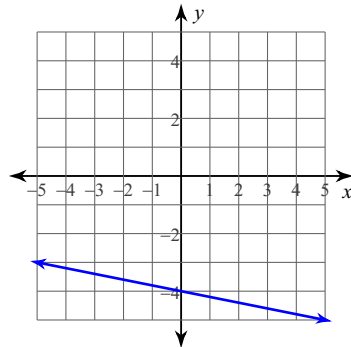
36)



37)



38)



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

39) through:  $(-4, 0)$ , slope =  $-\frac{1}{4}$

40) through:  $(-1, -4)$ , slope = 5

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

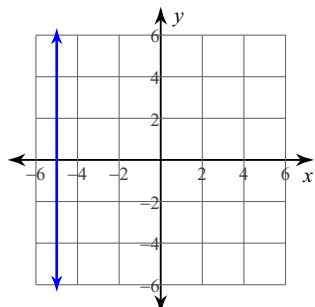
41) through:  $(1, -1)$  and  $(4, 3)$

42) through:  $(0, 4)$  and  $(-4, -4)$

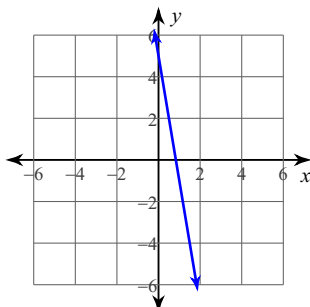
## Answers to 1-23 Semester Exam Review (ID: 1)

- |                  |          |                      |           |
|------------------|----------|----------------------|-----------|
| 1)               | 2)       | 3)                   | 4)        |
| 5)               | 6)       | 7) {3}               | 8) {17}   |
| 9) {20}          | 10) {72} | 11) {-9}             | 12) {-18} |
| 13) {20}         | 14) {12} | 15) {-8}             | 16) {-7}  |
| 17) No solution. | 18) {5}  | 19) All Real Numbers | 20) {1}   |

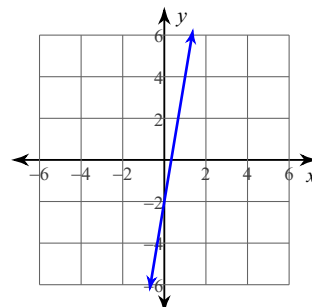
21)



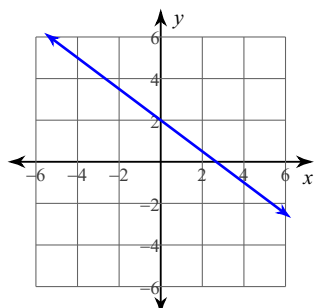
22)



23)



24)



25)  $-\frac{4}{5}$

26)  $-\frac{5}{4}$

27)  $\frac{5}{2}$

28)  $-\frac{7}{6}$

29)  $-\frac{7}{5}$

30)  $-\frac{19}{21}$

31)  $\frac{2}{5}$

32)  $-\frac{4}{3}$

33)  $y = -3$

34)  $y = -\frac{3}{2}x + 5$

35)  $y = \frac{9}{2}x + 4$

36)  $y = \frac{7}{4}x - 3$

37)  $y = -\frac{7}{3}x + 5$

38)  $y = -\frac{1}{5}x - 4$

39)  $y = -\frac{1}{4}x - 1$

40)  $y = 5x + 1$

41)  $y = \frac{4}{3}x - \frac{7}{3}$

42)  $y = 2x + 4$