

## Prior Knowledge Review 1

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

**Evaluate each function.**

1)  $g(x) = 3x + 2$ ; Find  $g(-7)$

2)  $k(x) = -3x - 2$ ; Find  $k(-2)$

3)  $h(x) = x^2 - 2x$ ; Find  $h(-7)$

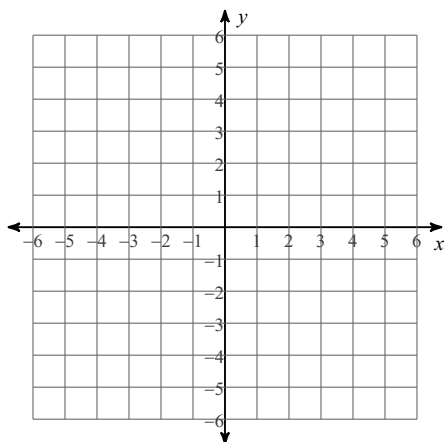
4)  $g(x) = x^2 - 1$ ; Find  $g(-4)$

5)  $k(n) = n^2 - 7n$ ; Find  $k(1)$

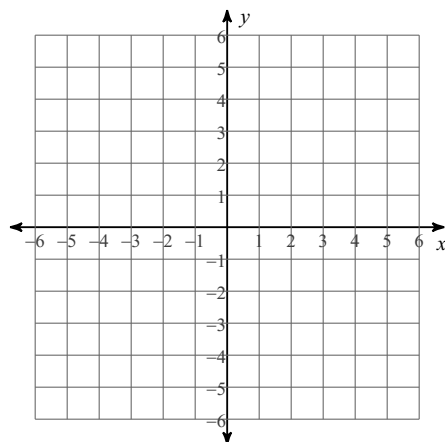
6)  $h(x) = x^2 + 5x$ ; Find  $h(4)$

**Sketch the graph of each line.**

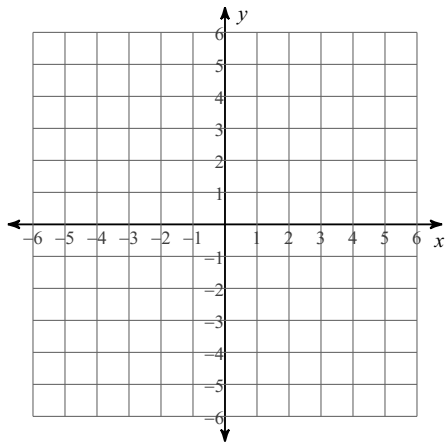
7)  $x$ -intercept = 4,  $y$ -intercept = -5



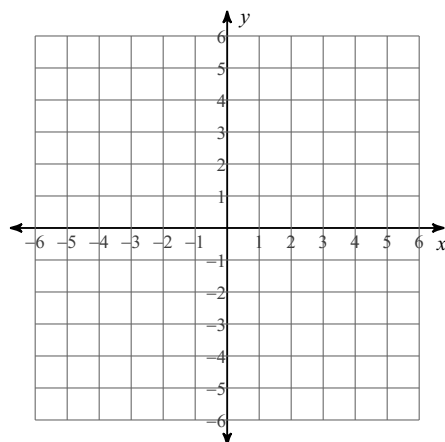
8)  $y = 1$



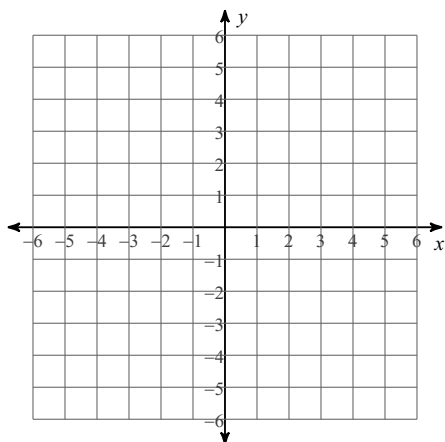
9)  $x = 4$



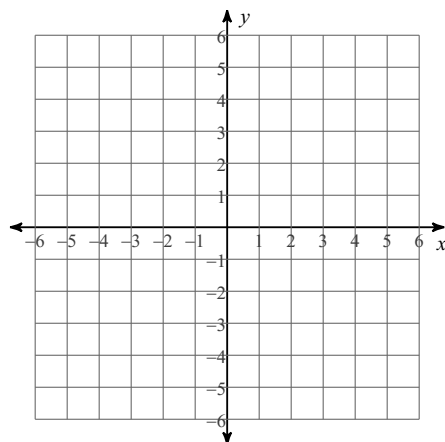
10)  $y = \frac{6}{5}x - 2$



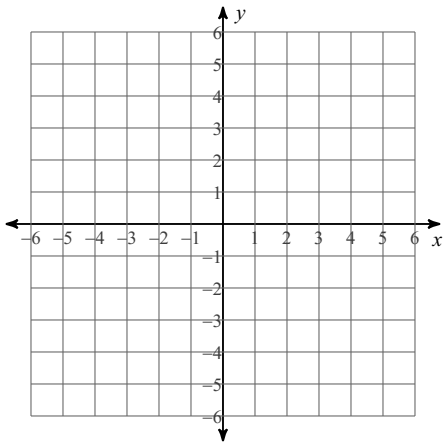
11)  $y = -\frac{1}{4}x + 1$



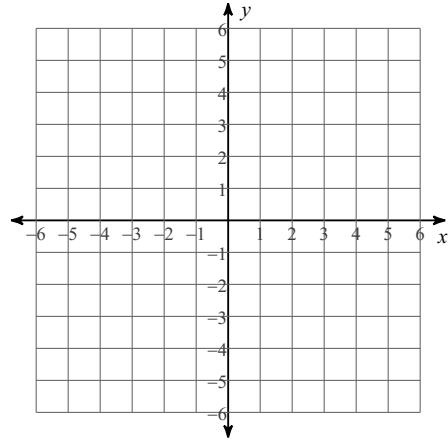
12)  $y = -\frac{3}{4}x - 1$



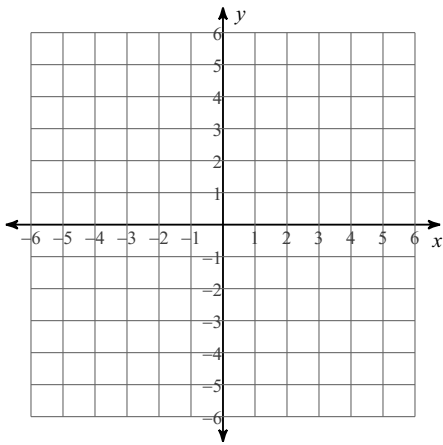
13)  $y = -\frac{3}{2}x + 1$



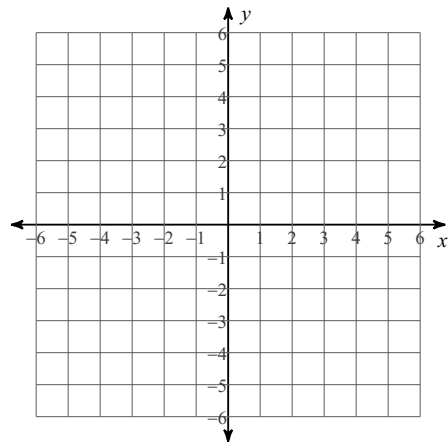
14)  $2x + 5y = -5$



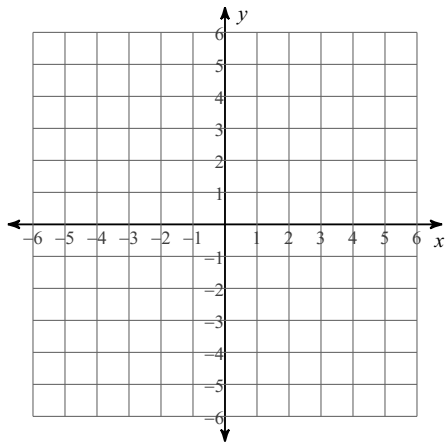
15)  $2x - y = -5$



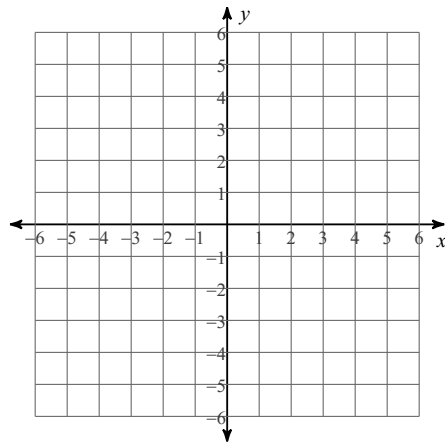
16)  $3x - 5y = 10$



17)  $x = -4$

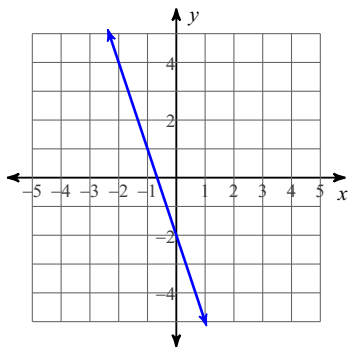


18)  $3x + 2y = 10$

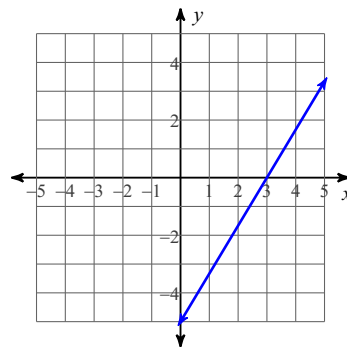


**Write the slope-intercept form of the equation of each line.**

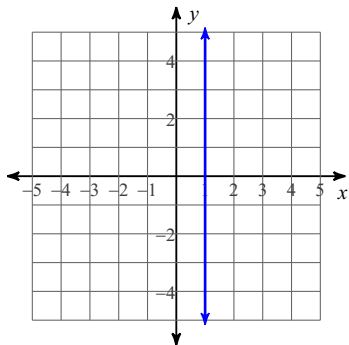
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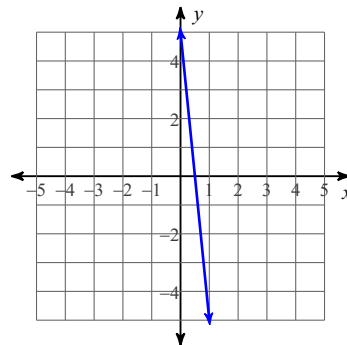
20)



21)



22)



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

23) Slope =  $\frac{1}{5}$ , y-intercept =  $-1$

24) Slope =  $-\frac{7}{3}$ , y-intercept =  $5$

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

25)  $7x + y = 7$

26)  $15x - 4y = -32$

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

27) through:  $(-2, -1)$ , slope =  $\frac{1}{2}$

28) through:  $(-1, 1)$ , slope =  $-\frac{1}{2}$

29) through:  $(-5, 2)$ , slope =  $-\frac{1}{5}$

30) through:  $(3, 4)$ , slope =  $\frac{3}{8}$

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

31) through:  $(2, 1)$  and  $(-1, 0)$

32) through:  $(4, 2)$  and  $(0, -1)$

33) through:  $(2, 4)$  and  $(5, -1)$

34) through:  $(-2, 2)$  and  $(2, 3)$

**Simplify.**

35)  $\sqrt{128}$

36)  $\sqrt{8}$

37)  $\sqrt{200}$

38)  $\sqrt{12}$

39)  $\sqrt{64}$

40)  $\sqrt{50}$

41)  $\sqrt{28}$

42)  $\sqrt{18}$

$$43) -6\sqrt{64}$$

$$44) -3\sqrt{112}$$

$$45) \frac{\sqrt{15}}{\sqrt{16}}$$

$$46) \frac{\sqrt{2}}{\sqrt{18}}$$

$$47) \frac{\sqrt{5}}{\sqrt{80}}$$

$$48) \frac{\sqrt{15}}{\sqrt{5}}$$

$$49) \frac{\sqrt{3}}{\sqrt{12}}$$

$$50) \frac{\sqrt{25}}{\sqrt{9}}$$

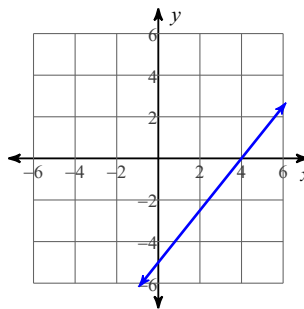
# Answers to Prior Knowledge Review 1 (ID: 1)

1) -19  
5) -6

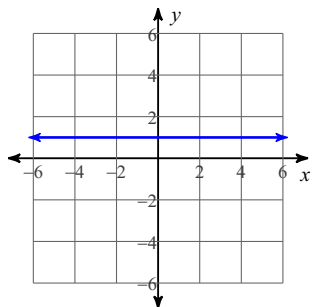
2) 4  
6) 36

3) 63  
7)

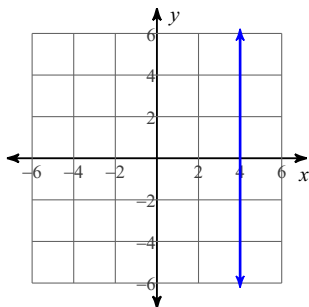
4) 15



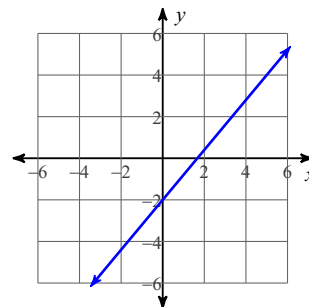
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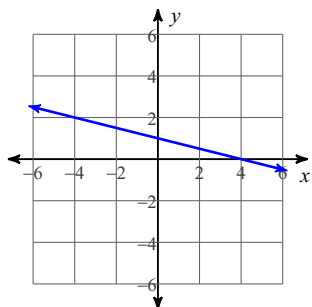
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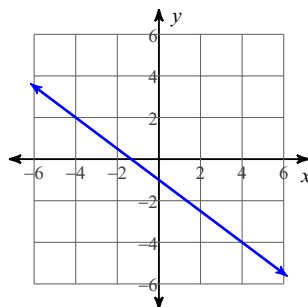
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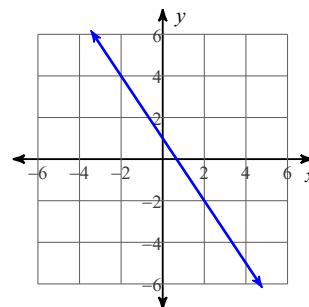
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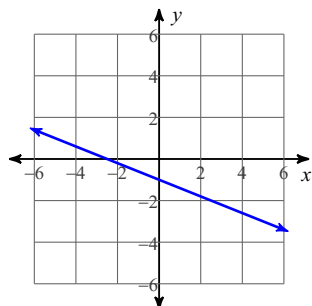
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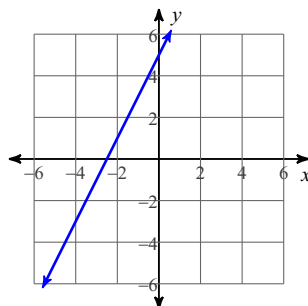
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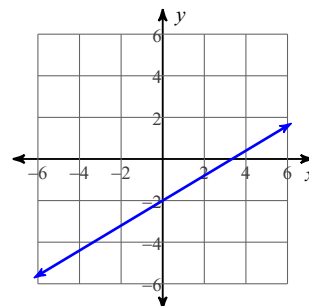
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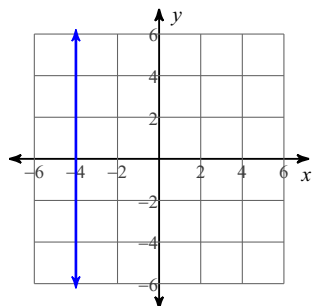
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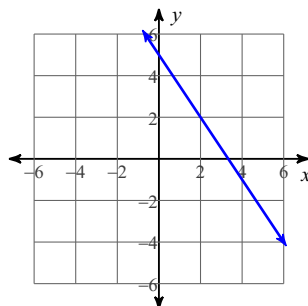
16)



17)



18)



19)  $y = -3x - 2$

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

21)  $x = 1$

22)  $y = -10x + 5$

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

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

25)  $y = -7x + 7$

26)  $y = \frac{15}{4}x + 8$

27)  $y = \frac{1}{2}x$



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

32)  $y = \frac{3}{4}x - 1$

36)  $2\sqrt{2}$

40)  $5\sqrt{2}$

44)  $-12\sqrt{7}$

48)  $\sqrt{3}$

29)  $y = -\frac{1}{5}x + 1$

33)  $y = -\frac{5}{3}x + \frac{22}{3}$

37)  $10\sqrt{2}$

41)  $2\sqrt{7}$

45)  $\frac{\sqrt{15}}{4}$

49)  $\frac{1}{2}$

30)  $y = \frac{3}{8}x + \frac{23}{8}$

34)  $y = \frac{1}{4}x + \frac{5}{2}$

38)  $2\sqrt{3}$

42)  $3\sqrt{2}$

46)  $\frac{1}{3}$

50)  $\frac{5}{3}$

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

35)  $8\sqrt{2}$

39) 8

43) -48

47)  $\frac{1}{4}$