

Unit 5B Study Guide

Date _____ Period _____

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

1) $6x + 7y = -56$

2) $2x - 7y = 14$

3) $x + 5y = -35$

4) $x + 2y = -14$

Write the standard form of the equation of each line.

5) $y = -x - 3$

6) $y = \frac{2}{3}x$

7) $y = \frac{11}{6}x - 6$

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

Identify the x-intercept and y-intercept. WRITE AS ORDERED PAIR.

9) $x - y = 4$

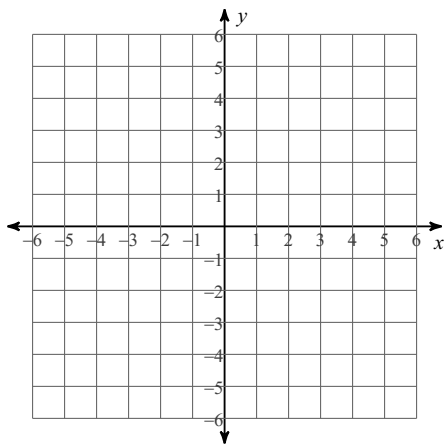
10) $x + 3y = 12$

11) $5x + 3y = -15$

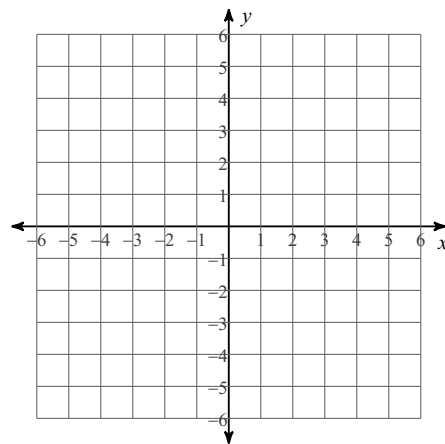
12) $3x + 2y = -6$

Sketch the graph of each line.

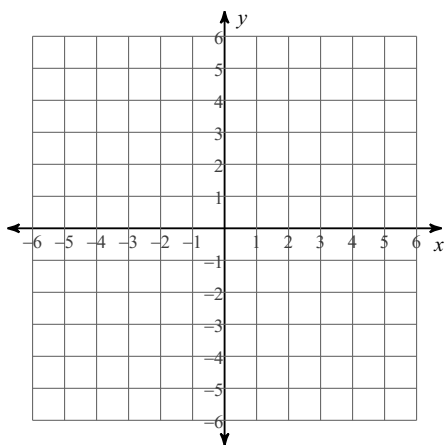
13) $x + y = 4$



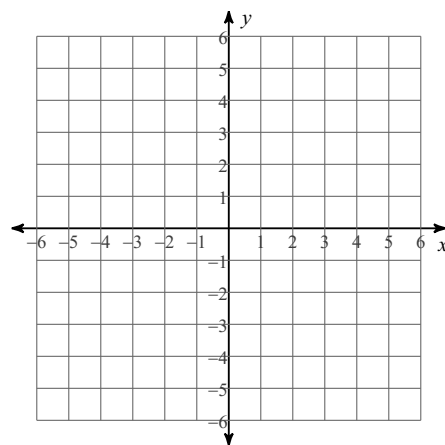
14) $2x - 3y = -6$



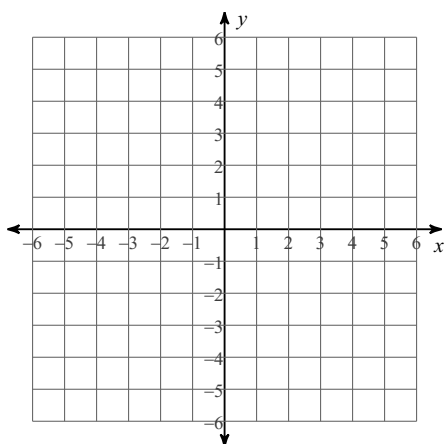
15) $2x - y = -2$



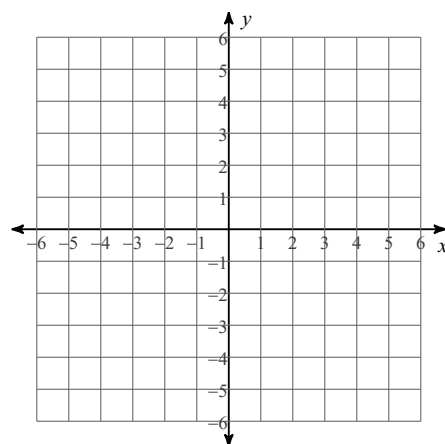
16) $7x - 3 = -y$



17) $y = 4$



18) $20 = -4y - 7x$



- 19) You are preparing a fruit salad with pineapples, which have 3 grams of carbs, and watermelon, which has 2 grams of carbs. You want a total of 24 grams of carbs in the fruit salad. Write an equation to represent the scenario. Then find your intercepts and explain their meaning.

Equation: _____

x-intercept: _____, _____

y-intercept: _____, _____

- 20) You are selling tickets to a school talent show, where student tickets are \$6 and adult tickets are \$8. You made a total of \$600. Write an equation to represent the scenario. Then find your intercepts and explain their meaning.

Equation: _____

x-intercept: _____, _____

y-intercept: _____, _____

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

21) through: $(-1, -4)$, parallel to $y = -7x$

22) through: $(-2, -2)$, parallel to $y = -3$

23) through: $(4, -2)$, parallel to $y = \frac{1}{2}x + 3$

24) through: $(-1, 0)$, perp. to $y = -x - 1$

25) through: $(-2, 2)$, perp. to $x = 0$

26) through: $(-1, 0)$, perp. to $y = \frac{1}{3}x + 1$

Answers to Unit 5B Study Guide

1) $y = -\frac{6}{7}x - 8$

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

3) $y = -\frac{1}{5}x - 7$

4) $y = -\frac{1}{2}x - 7$

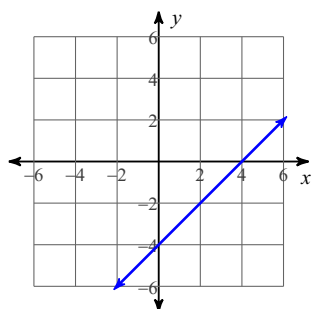
5) $x + y = -3$

6) $2x - 3y = 0$

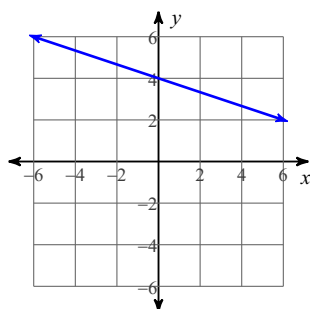
7) $11x - 6y = 36$

8) $2x - 5y = -5$

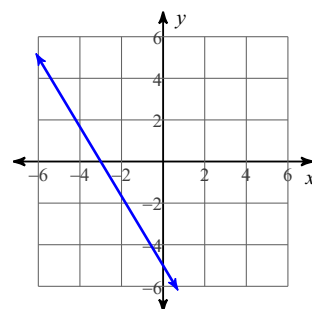
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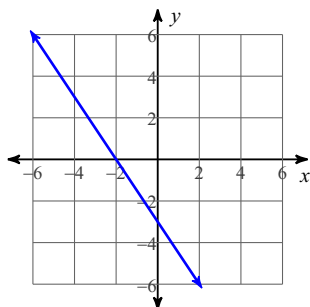
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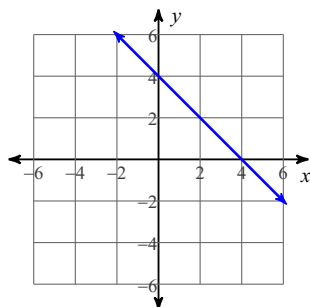
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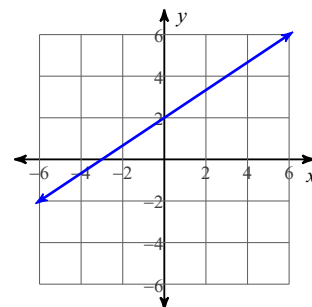
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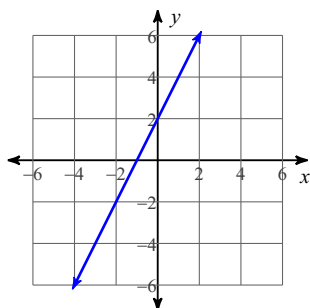
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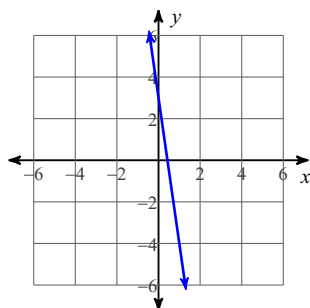
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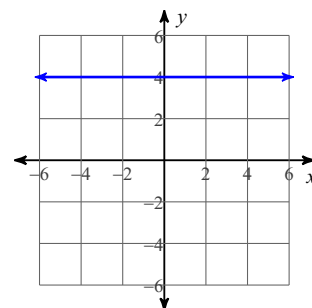
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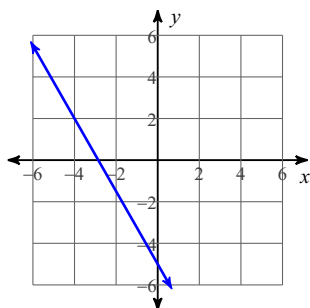
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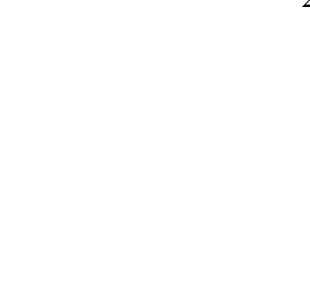
17)



18)



19)



20)

21) $y = -7x - 11$

22) $y = -2$

23) $y = \frac{1}{2}x - 4$

24) $y = x + 1$

25) $y = 2$

26) $y = -3x - 3$