Bell Work 3/3/2015

Grab a small sheet of paper and solve the following:

$$\frac{1}{2}(8x-12)+4=5x-3+10x+7$$

$4x-6+4=15x+4$

$4x-2=15x+4$

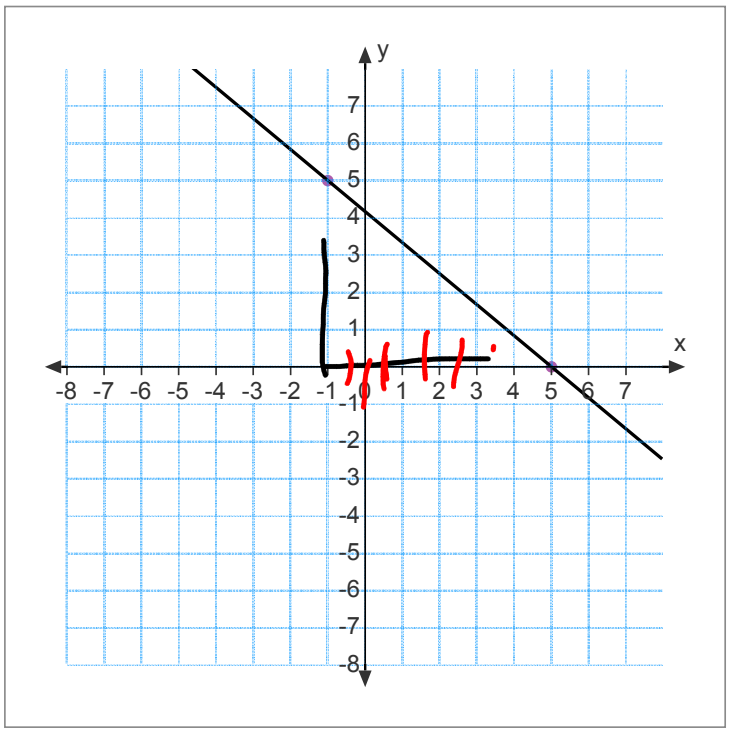
$-4x \quad -4x$

$-2=11x+4$

$-4 \quad -4$

$\frac{-6}{11}=\frac{11x}{11}$

$\frac{-6}{11}=x$



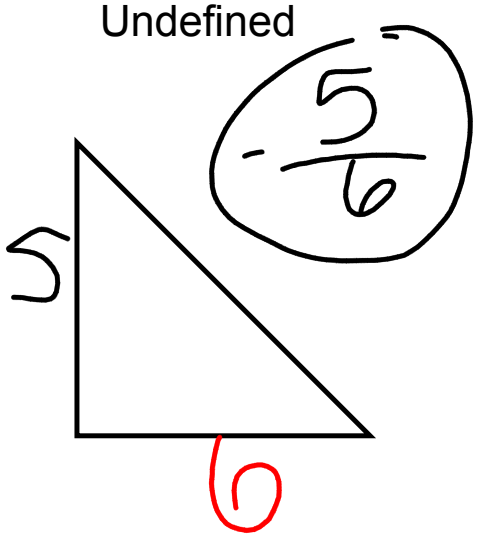
Slope

Pos.

Neg.

Zero

Undefined



Intercepts

X - Intercept: where the line crosses the x-axis.

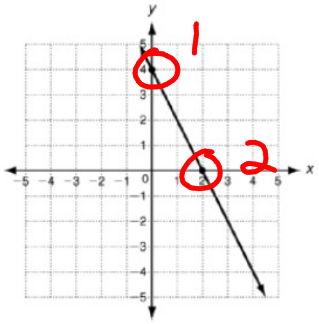
Y - Intercept: where the line crosses the y-axis.

LESSON 5-2

Practice A

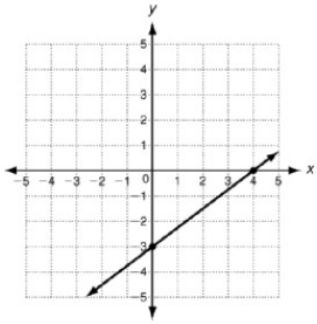
Using Intercepts

Find the *x*- and *y*-intercepts.

1. 

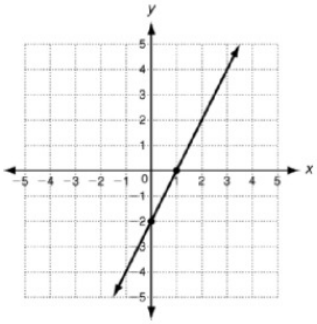
x-intercept: (2, 0)

y-intercept: (0, 4)

2. 

x-intercept: (4, 0)

y-intercept: (0, -3)

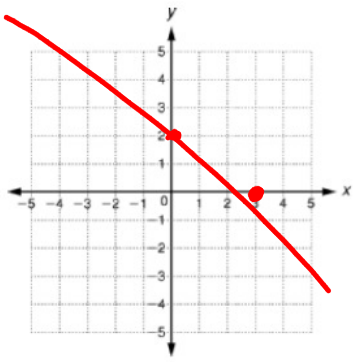
3. 

x-intercept: (1, 0)

y-intercept: (0, -2)

4. Find the intercepts of $2x + 3y = 6$ by following the steps below.

a. Substitute $y = 0$ into the equation. Solve for x.



b. The x-intercept is: (3, 0)

c. Substitute $x = 0$ into the equation. Solve for y.

d. The y-intercept is: (0, 2)

e. Use the intercepts to graph the line described by the equation.

(a) $2x + 3(0) = 6$

$\frac{2x}{2} = \frac{6}{2}$

$x = 3$

(c) $2(0) + 3y = 6$

$\frac{3y}{3} = \frac{6}{3}$

$y = 2$

5. Jennifer started with $50 in her savings account. Each week she withdrew $10. The amount of money in her savings account after x weeks is represented by the function $f(x) = 50 - 10x$.

   a. Find the intercepts and graph the function.

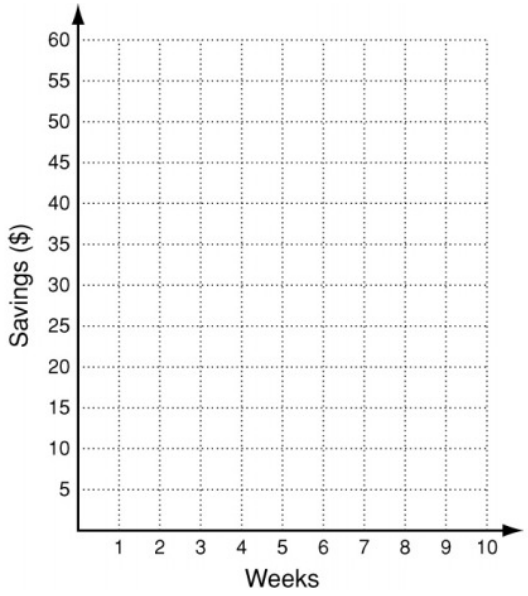
   _____

   b. What does each intercept represent?

   _____

   _____

   _____

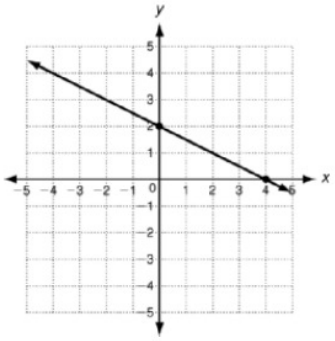


LESSON 5-2

Practice B

Using Intercepts

Find the *x*- and *y*-intercepts.

1. 

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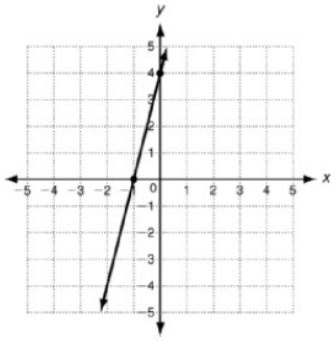
2. 

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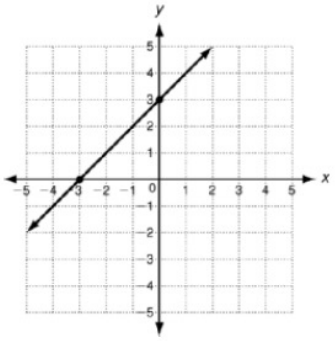
3. 

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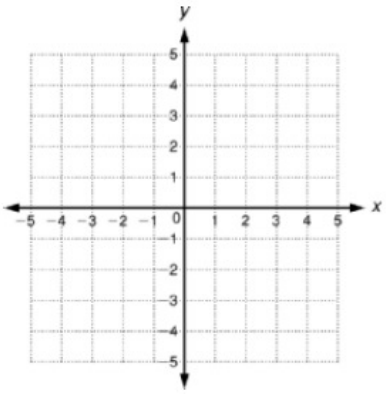
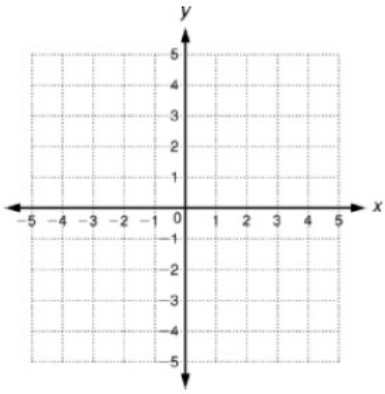
Use intercepts to graph the line described by each equation.

4. $3x + 2y = -6$



5. $x - 4y = 4$



6. At a fair, hamburgers sell for \$3.00 each and hot dogs sell for \$1.50 each. The equation $3x + 1.5y = 30$ describes the number of hamburgers and hot dogs a family can buy with \$30.

   a. Find the intercepts and graph the function.

   _____

   b. What does each intercept represent?

   _____

   _____

   _____

   _____