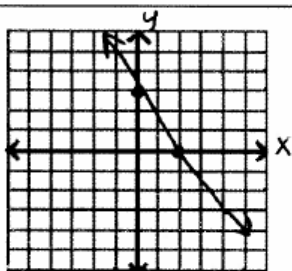


HW Page 51

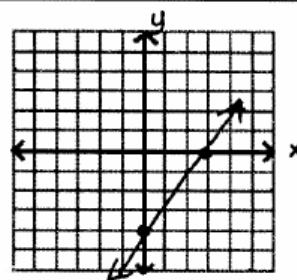
1. $3x + 2y = 6$

x	y
0	3
2	0



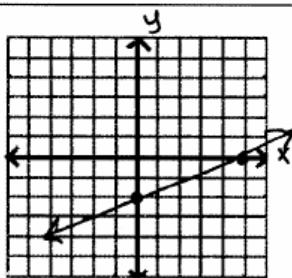
2. $4x - 3y = 12$

x	y
0	-4
3	0



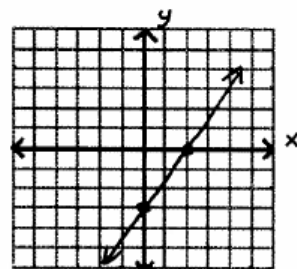
3. $-2x + 5y = -10$

x	y
0	-2
5	0



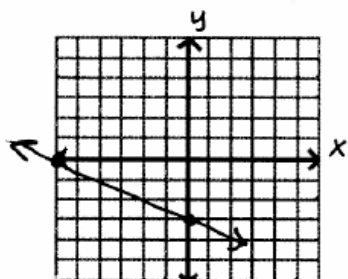
4. $3x - 2y = 6$

x	y
0	-3
2	0



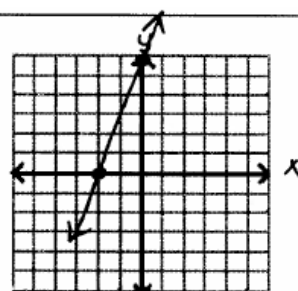
5. $-x - 2y = 6$

x	y
0	-3
-6	0



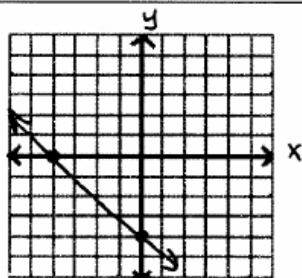
6. $3x - y = -6$

x	y
0	6
-2	0



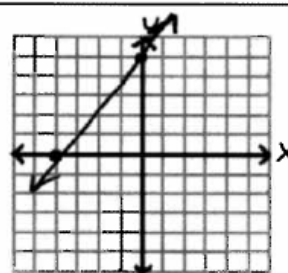
7. $x + y = -4$

x	y
0	-4
-4	0



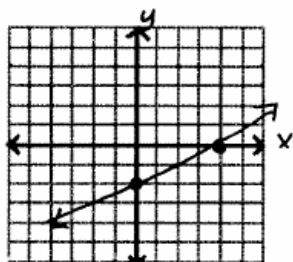
8. $5x - 4y = -20$

x	y
0	5
-4	0



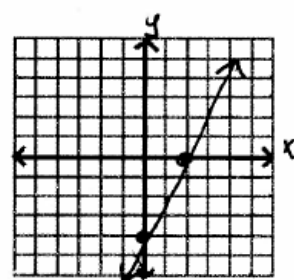
9. $20x - 40y = 80$

x	y
0	-2
4	0



10. $-x + \frac{1}{2}y = -2$

x	y
0	-4
2	0



$$2 \cdot \frac{1}{2}y = -2 \cdot 2$$

$$y = -4$$

~~~~~

$$-x = -2$$

$$x = 2$$

Algebra 1 – WH

name \_\_\_\_\_

Intercepts: Exit Ticket

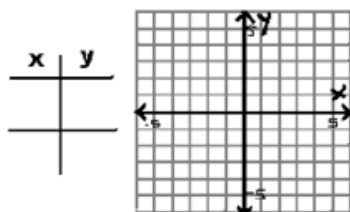
date \_\_\_\_\_ Pd \_\_\_\_\_

1. Label the x- and y-intercepts on the following graph:



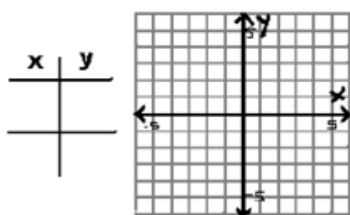
2. Graph using the x- and y-intercepts.

$$-5x + 2y = 10$$



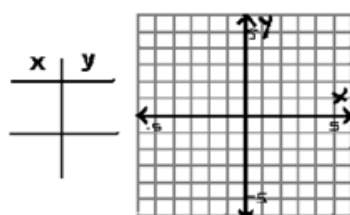
3. Graph using the x- and y-intercepts.

$$x - y = 2$$

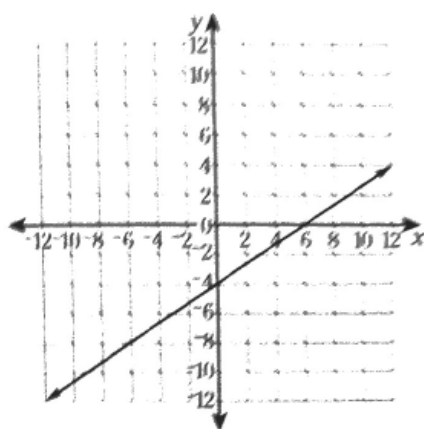


4. Graph:

$$y = 2x - 3$$



1. A graph of a linear equation is shown below.



Which equation describes the graph?

A  $y = \frac{3}{2}x + 4$

B  $y = \frac{2}{3}x + 4$

C  $y = \frac{3}{2}x - 4$

D  $y = \frac{2}{3}x - 4$

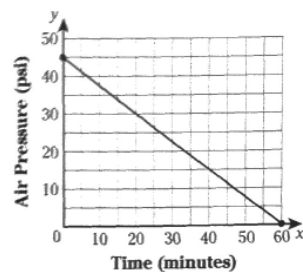
2. Which statement is true of the equation below?

$$y - 6 = -3(x + 1)$$

- A The slope is 3 and the y-intercept is 1.
- B The slope is 3 and the y-intercept is -6.
- C The slope is -3 and the y-intercept is 1.
- D The slope is -3 and the y-intercept is 3.



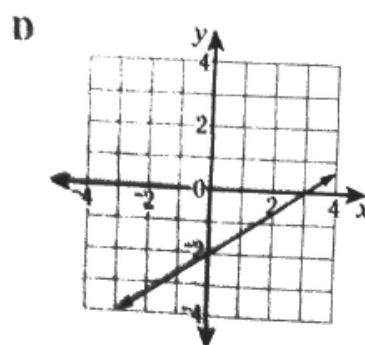
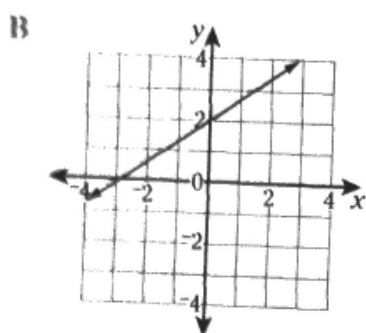
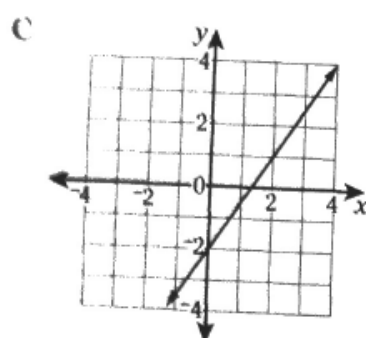
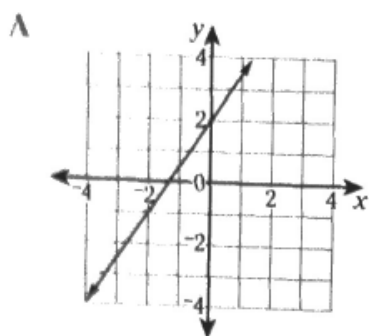
3. The air pressure in a tire is 45 pounds per square inch (psi). Air is released at a constant rate until the tire is deflated. The graph below shows the air pressure ( $y$ ) in the tire after  $x$  minutes.



Which of these equations represents the relationship between time and the air pressure?

- A  $y = \frac{3}{4}x + 45$
- B  $y = \frac{3}{4}x - 45$
- C  $y = -\frac{3}{4}x + 45$
- D  $y = -\frac{3}{4}x - 45$

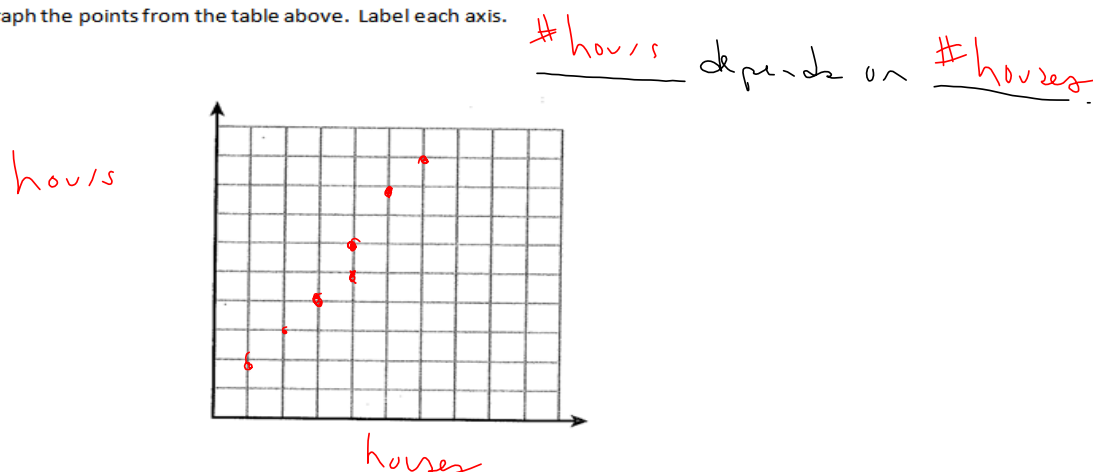
4. Which graph shows the line  $y + 2 = \frac{3}{2}x$ ?



During the summer, Bonnie cleans houses to earn money. She keeps track of the number of houses that she cleans and how many hours it takes her each day for seven days. The table below shows her data for one week.

|             |   |   |   |   |   |   |   |
|-------------|---|---|---|---|---|---|---|
| # of houses | 3 | 4 | 1 | 5 | 4 | 2 | 6 |
| hours       | 4 | 6 | 2 | 8 | 5 | 3 | 9 |

- A. Graph the points from the table above. Label each axis.



- B. Identify the domain and range of the data. Name the values and what they represent.

Domain:  $\{1, 2, 3, 4, 5, 6\}$  # houses

Range:  $\{2, 3, 4, 5, 6, 8, 9\}$  # hours

- C. Explain how you know whether or not this relation is a function.

This is not a function because 4 maps to two different y-values

Kate is going to solve the inequality shown below. In the inequality,  $e$  represents the # of eggs that Kate's chicken coup produces every day.

$$8 + |4e - 7| \geq 17$$

- a) Solve the inequality and show your work.

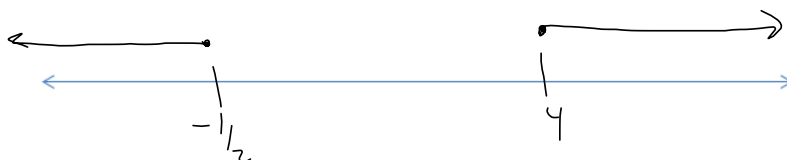
$$|4e - 7| \geq 9$$

$$4e - 7 \geq 9 \quad \text{or} \quad 4e - 7 \leq -9$$

$$4e \geq 16 \quad \quad \quad 4e \leq -2$$

$$e \geq 4 \quad \quad \quad \text{or} \quad e \leq -\frac{1}{2}$$

- b) Graph the solution to the inequality on this number line.



- c) Kate says that  $e = -1$  is a reasonable solution to the inequality. Explain why Kate thinks that, but also explain why she is incorrect in this situation.

Kate believes that  $-1$  is a solution because it falls under the shaded region.

$e = -1$  makes no sense because you can't have a negative number of eggs.

