

READY, SET, GO!

Name

Period

Date

**READY****Topic: Recognizing Solutions to Equations**

The solution to an equation is **the value of the variable** that makes the equation **true**. In the equation  $9a + 17 = -21$ , "a" is the variable. When  $a = 2$ ,  $9a + 17 \neq -19$ , because  $9(2) + 17 = 35$ . Thus  $a = 2$  is NOT a solution. However, when  $a = -4$ , the equation is true  $9(-4) + 17 = -19$ . Therefore,  $a = -4$  must be the solution.

**Identify which of the 3 possible numbers is the solution to the equation.**

1.  $3x + 7 = 13$  ( $x = -2$ ;  $x = 2$ ;  $x = 5$ )

2.  $8 - 2b = -2$  ( $b = -3$ ;  $b = 0$ ;  $b = 5$ )

3.  $5 + 4g + 8 = 1$  ( $g = -3$ ;  $g = -1$ ;  $g = 2$ )

4.  $6t - 5 + 5t = 105$  ( $t = 4$ ;  $t = 7$ ;  $t = 10$ )

Some equations have two variables. You may recall seeing an equation written like the following:  $y = 5x + 2$ . We can let  $x$  equal a number and then work the problem with this  $x$ -value to determine the associated  $y$ -value. A solution to the equation must include both the  $x$ -value and the  $y$ -value. Often the answer is written as an **ordered pair**. The  **$x$ -value is always first**. Example:  $(x, y)$ . The order matters!

**Determine the  $y$ -value of each ordered pair based on the given  $x$ -value.**

5.  $y = 6x - 15$ ;  $(8, \quad)$ ,  $(-1, \quad)$ ,  $(5, \quad)$

6.  $y = -4x + 9$ ;  $(-5, \quad)$ ,  $(2, \quad)$ ,  $(4, \quad)$

7.  $y = 2x - 1$ ;  $(-4, \quad)$ ,  $(0, \quad)$ ,  $(7, \quad)$

8.  $y = -x + 9$ ;  $(-9, \quad)$ ,  $(1, \quad)$ ,  $(5, \quad)$

**SET**

Topic: Using a constant rate of change to complete a table of values

**Fill in the table. Then write a sentence explaining how you figured out the values to put in each cell.**

9. You run a business making birdhouses. You spend \$600 to start your business, and it costs you \$5.00 to make each birdhouse.

# of birdhouses	1	2	3	4	5	6	7
Total cost to build							

Explanation:

10. You make a \$15 payment on your loan of \$500 at the end of each month.

# of months	1	2	3	4	5	6	7
Amount of money owed							

Explanation:

11. You deposit \$10 in a savings account at the end of each week.

# of weeks	1	2	3	4	5	6	7
Amount of money saved							

Explanation:

12. You are saving for a bike and can save \$10 per week. You have \$25 when you begin saving.

# of weeks	1	2	3	4	5	6	7
Amount of money saved							

Explanation:

## GO

Topic: Graph Linear Equations Given a Table of Values.

Graph the ordered pairs from the tables on the given graphs.

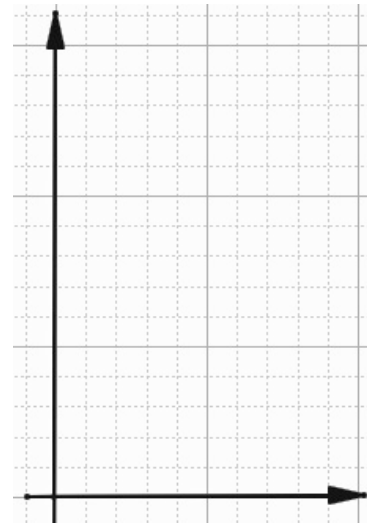
13.

$x$	$y$
0	3
2	7
3	9
5	13



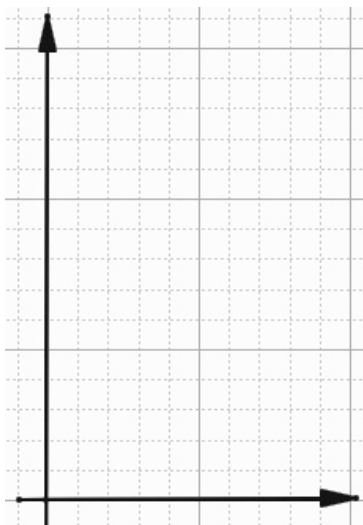
14.

$x$	$y$
0	14
4	10
7	7
9	5



15.

$x$	$y$
2	11
4	10
6	9
8	8



16.

$x$	$y$
1	4
2	7
3	10
4	13

