READY, SET, GO!

Name

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

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

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,

$$), (-1,$$

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

7.
$$y = 2x - 1$$
; $(-4,), (0,), (7,)$ 8. $y = -x + 9$; $(-9,), (1,), (5,)$

8.
$$v = -x + 9$$
: (-9)

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.

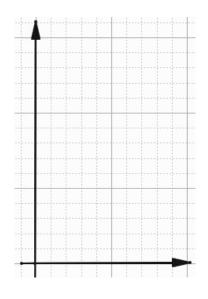
# of weeks	1	2	3	4	5	6	7
Amount of money saved							

Explanation:

GO

Topic: Graph Linear Equations Given a Table of Values. Graph the ordered pairs from the tables on the given graphs.

13.		14.	
x	у	X	у
0	3	0	14
2	7	4	10
3	9	7	7
5	13	9	5



15.			 16.	
x	У	1	x	у
2	11		1	4
4	10		 2	7
6	9		3	10
8	8		4	13
			1	

