Date

1.1

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.

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5.
$$y = 6x - 15$$
; (8,), (-1,), (5,)
6. $y = -4x + 9$; (-5,), (2,), (4,)

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

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

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SECONDARY MATH I // MODULE 1 SEQUENCES - 1.1

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:

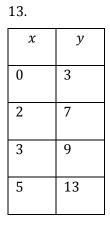
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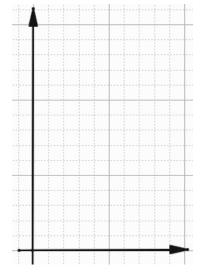


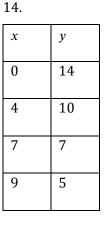
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Topic: Graph Linear Equations Given a Table of Values.

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

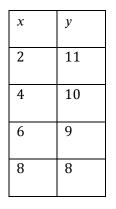


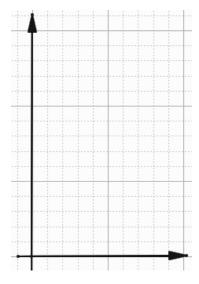




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