Algebra 1- Week 6 Homework

**Monday- (Algebra Nation: Section 1: Expressions, Topic 1: Using Expressions to Represent Real World Situations)**

***Translate each verbal phrase into an algebraic expression.***

1. A number increased by a different number
2. Three times the quotient of a number and 5
3. Alicia draws a rectangle on her paper. The length of the rectangle is twice the length of its width. Write an expression that represents the perimeter of the figure.

**Tuesday- (Algebra Nation: Section 1: Expressions, Topic 2: Understanding Polynomial Expressions)**

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**Wednesday- (Algebra Nation: Section 2: Equations and Inequalities, Topic 1, 2, and 3: Equations: True or False?, Identifying Properties When Solving Equations, and Solving Equations)**

***Add/Subtract One Step Equations***

|  |  |  |  |
| --- | --- | --- | --- |
| Problem | Show Your Work | Answer | Check Your Answer |
| 1. k – 13 = 18
 |  |  |  |
| 1. -6 + x = 5
 |  |  |  |
| 1. z – 5 = 19
 |  |  |  |
| 1. 10 – s = 4
 |  |  |  |

***Multiply/Divide One Step Equations***

|  |  |  |  |
| --- | --- | --- | --- |
| Problem | Show Your Work | Answer | Check Your Answer |
| 1. -x = 18
 |  |  |  |
| 1. -2x = 30
 |  |  |  |
| 1. $\frac{x}{7}=3$
 |  |  |  |
| 1. $\frac{2}{3}x=4$
 |  |  |  |

**Thursday- (Algebra Nation: Section 2: Equations and Inequalities, Topic 1, 2, and 3: Equations: True or False?, Identifying Properties When Solving Equations, and Solving Equations)**

***Two-Step Equations***

|  |  |  |  |
| --- | --- | --- | --- |
| Problem | Show Your Work | Answer | Check Your Answer |
| 1. $2x+6=18$
 |  |  |  |
| 1. $3-5g=33$
 |  |  |  |
| 1. $4+\frac{w}{6}=10$
 |  |  |  |
| 1. $\frac{4}{5}s+1=9$
 |  |  |  |

**Friday- (Algebra Nation: Section 1: Expressions, Topic 3: Algebraic Expressions Using the Distributive Property)**

***Distributive Property***

|  |  |
| --- | --- |
| **Problem** | **Answer** |
| **1. Simplify:** $ 3(x+6+2w)$ |  |
| **2. Simplify:** $ 10-3\left(x+9-10x\right)$ |  |
| **Problem** | **Show Your Work** | **Answer** | **Check your answer** |
| **3. Solve for x:** $ 3(x+2)=9$ |  |  |  |
| **4. Solve for x:** $-4(x+5)=16$ |  |  |  |