Algebra 1- Week 7 Homework

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

***Multi-Step Equations***

|  |  |  |  |
| --- | --- | --- | --- |
| Problem | Show Your Work | Answer | Check Your Answer |
| 1. 17 + 3n = 21 + 2n
 |  |  |  |
| 1. 2(x – 2) = 3x
 |  |  |  |
| 1. 13 = 13 + 5(x – 2)
 |  |  |  |
| 1. 2(x – 3) + 5 = 3(x – 1)
 |   |  |  |

**Tuesday/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)

***Multi-Step Equations***

Solve each equation using two different procedures.

|  |  |
| --- | --- |
| 1. 5g + 12 = 21g + 20
 | 1a. 5g + 12 = 21g + 20 |
| 1. 6(x + 6) = 7(x – 9)
 | 2a. 6(x + 6) = 7(x – 9) |

**Thursday-** (Algebra Nation: Section 4: Linear Equations, Functions, and Inequalities, Topic 5: Introduction to Systems of Equations)

*Create a multistep equation with the given number of solutions. Solve. Then, explain your reasoning with in two complete sentences.*

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| 1. No Solutions |
| 2. Infinite Solutions |
| 3. One Solution |

**Friday-** (Algebra Nation: Section 4: Linear Equations, Functions, and Inequalities, Topic 3 and 4: Interpreting Rate of Change and y-intercept in a Real World Context)

*Bobby and Billy are brothers. Bobby weighs 150 pounds and is gaining ten pounds each month. Billy weighs 360 pounds and is losing 20 pounds each month.*

* Equation:
* How many months, ***m***, will it take for Billy to weigh the same as Bobby?
* How much will the brothers weight at that point?