

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

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. $17 + 3n = 21 + 2n$			
2. $2(x - 2) = 3x$			
3. $13 = 13 + 5(x - 2)$			
4. $2(x - 3) + 5 = 3(x - 1)$			

**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.

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

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.*

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?