**HOME COMPONENT: *Solve/Write Two-Step Equations***

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| A **two-step equation** contains two operations. To solve a two-step equation, undo each operation in reverse order. |

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| **Example 1: Solve****Solve 2*a* + 6 = 14. Check your solution.** 2*a* + 6 = 14 Write the equation. – 6 = –6 Subtraction Property of Equality 2*a* = 8 Simplify. $\frac{2a}{2}=\frac{8}{2}$ Division Property of Equality *a* = 4 Simplify.**Check** 2*a* + 6 = 14 Write the equation. 2(4) + 6 ≟ 14 Replace *a* with 4 to see if the sentence is true. 14 = 14 🗸 The sentence is true.The solution is 4. | **Example 3: Write** Kim has $12 that she got for her birthday and saves $5 each week. How many week will it take Kim to save $32?  **Let statement:** *let w = weeks* **Identify Total:** *$32* **Identify Unit Rate:** *5w ($5 each week)* **Identify Constant:** *$12 (started with $12)***5w + 12 = 32****Unit Rate + Constant = Total** |
| **Example 2****Translate the sentence into an equation. Then find the number. Thirteen more than five times a number is 28.****Words** Thirteen more than five times a number is 28.**Variable** Let *n* = the number.**Equation** 5*n* + 13 = 28 Write the equation. –13 = –13 Subtraction Property of Equality 5*n* = 15 Simplify. $\frac{5n}{5}=\frac{15}{5}$ Division Property of Equality *n* = 3 | **Now You Try: Solve**2*d* + 7 = 9 | **Check**2*d* + 7 = 9 |

**Exercises- Solve 2 Step MUST SHOW ALL WORK!**

**Solve each equation. Check your solution.**

 **1.** 11 = 3*z* + 5 **2.** 2*s* – 4 = 6 **3.** – 6*p* – 3 = 9

 **4.** $2+\frac{a}{6}=5$ **5.** $-\frac{1}{3}q -7=-3$ **6.** $4 - \frac{v}{5}=0$

**Translate 2-Step Equations: Solve and Check –SHOW ALL WORK**

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| **7.** Four more than three times a  number is 19. | **8.** Five is seven less than twice a  number | **9.** Seven more than the quotient of a  number and 3 is10 |

**Write 2-Step Equations: Solve and Check-SHOW ALLW ORK**

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| **10. EXERCISE** Ella swims the same number of laps 3 days per week (Mon, Wed and Fri) and 15 laps on Saturday. She swims a total of 51 laps each week. How many laps does she swim on Monday? | **11. FOOD** At the market, Meyer buys a bunch of bananas for $0.65 per pound and a frozen pizza for $4.99. The total for his purchase was $6.94, without tax. How many pounds of bananas did Meyer buy? |

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| **Question 12** | **Question 13** | **Question 14** |
| Guadalupe wants to buy new goggles that cost $31.50. She has $4.50 and plans to save $2.25 each week. How many weeks will it take her to save the money? |  |  |