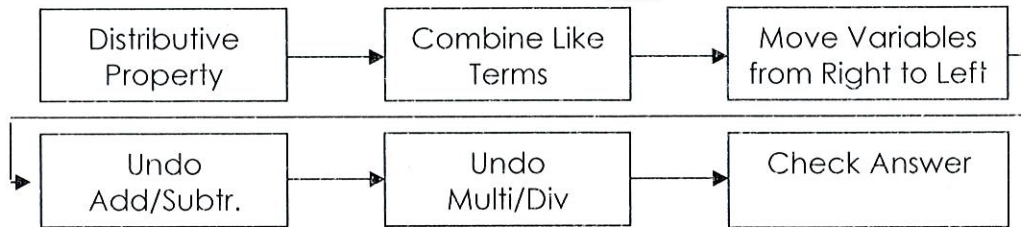


Name \_\_\_\_\_

Date \_\_\_\_\_

## Day 1 - Algebra 1 Review

- SOLVE & CHECK EACH EQUATION.
- Be sure to show your steps for solving each problem, line by line
- Watch your signs
- Circle all answers, please!



$$\begin{array}{l}
 1. \quad 15 = t + 18 \\
 \quad \quad \underline{-18 \quad -18} \\
 \quad \quad -3 = t \\
 \quad \quad \boxed{t = -3}
 \end{array}$$

$$\begin{array}{l}
 2. \quad a - (-4) = -28 \\
 \quad \quad \underline{a + 4 = -28} \\
 \quad \quad \underline{-4 \quad -4} \\
 \quad \quad \boxed{a = -32}
 \end{array}$$

$$\begin{array}{l}
 3. \quad -4y = -64 \\
 \quad \quad \underline{-4 \quad -4} \\
 \quad \quad \boxed{y = 16}
 \end{array}$$

$$\begin{array}{l}
 4. \quad \frac{x}{6} + 5 = 2 \\
 \quad \quad \underline{-5 \quad -5} \\
 \quad \quad \frac{x}{6} = -3 \cdot 6 \\
 \quad \quad \underline{\cdot 6 \quad \cdot 6} \\
 \quad \quad \boxed{x = -18}
 \end{array}$$

$$\begin{array}{l}
 5. \quad -5x + 6 = -9 \\
 \quad \quad \underline{-6 \quad -6} \\
 \quad \quad \underline{-5x = -15} \\
 \quad \quad \underline{-5 \quad -5} \\
 \quad \quad \boxed{x = 3}
 \end{array}$$

$$\begin{array}{l}
 6. \quad -10 = 5x - 40 \\
 \quad \quad \underline{+40 \quad +40} \\
 \quad \quad 30 = 5x \\
 \quad \quad \underline{5 \quad 5} \\
 \quad \quad 6 = x \\
 \quad \quad \boxed{x = 6}
 \end{array}$$

$$\begin{array}{l}
 7. \quad y - 2(3y - 2) = -6 \\
 \quad \quad \underline{y - 6y + 4 = -6} \\
 \quad \quad \underline{-5y + 4 = -6} \\
 \quad \quad \underline{-4 \quad -4} \\
 \quad \quad \underline{-5y = -10} \\
 \quad \quad \underline{-5 \quad -5} \\
 \quad \quad \boxed{y = 2}
 \end{array}$$

$$\begin{array}{l}
 8. \quad 4t - 2t + 15 = 41 \\
 \quad \quad \underline{2t + 15 = 41} \\
 \quad \quad \underline{-15 \quad -15} \\
 \quad \quad \underline{2t = 26} \\
 \quad \quad \underline{2 \quad 2} \\
 \quad \quad \boxed{t = 13}
 \end{array}$$

$$\begin{array}{l}
 9. \quad 6x + 14 = 4x - 6 \\
 \quad \quad \underline{-4x \quad -4x} \\
 \quad \quad \underline{2x + 14 = -6} \\
 \quad \quad \underline{-14 \quad -14} \\
 \quad \quad \underline{2x = -20} \\
 \quad \quad \underline{2 \quad 2} \\
 \quad \quad \boxed{x = -10}
 \end{array}$$

10. Describe in words what is happening in each step.

$$3x + 5 = 4x + 6$$

$$3x - 4x + 5 = 4x - 4x + 6$$

$$-x + 5 = 6$$

$$-x + 5 - 5 = 6 - 5$$

$$-x = 1$$

$$\frac{-x}{-1} = \frac{1}{-1}$$

$$x = -1$$

$$x = -1$$

4x was subtracted from both sides.  
combined like terms.

5 was subtracted from both sides.  
combined like terms.

divided by -1 on both sides.