Name: _____
Date: _____ Block: _____

B2 Worksheet (10.1 10.2 10.3)

Ms.Stromgren
Math 8

B2 - model and solve problems using linear equations of the form: $ax = b$, $ax + b = c$ $\frac{x}{a} + b = c$, *or* $a(x + b) = c$ *concretely, pictorially, and symbolically, where a, b, and are integers and a cannot equal 0.*

Part 1: Solve the following. Circle answers. Show work.

1. $5x = 35$	2. $\frac{y}{7} = -3$
3. $-24 = -8m$	4. $9 = \frac{h}{-2}$
5. $x + 24 = 35$	6. $y - 22 = -13$
7. $2x + 50 = 30$	8. $-4y - 2 = -26$

Part 1 Continued: Solve the following. Circle answers. Show work.

9. $\frac{n}{7} - 5 = -1$	10. $\frac{r}{-2} + 7 = -2$
11. $-6 = 5 + \frac{x}{-3}$	12. $8 - 2x = 10$
13. $-18 = 2g + 18$	14. $-16 = -4d - 6$

Part 2: Solve and **check** the following. Circle answers. Show work.

1. $5x = 75$	2. $-7 = \frac{t}{2}$
3. $-3x + 7 = -2$	4. $\frac{m}{4} - 9 = -3$
5. $3 + \frac{x}{-6} = 0$	6. $15 = 9 - 3w$

Part 3: Solve the following. Circle answers. Show work.

1. Show whether $x = 5$ is the solution to the following:
DO NOT JUST SOLVE

$$2x - 12 = -2$$

2. Show whether $m = -24$ is the solution to the following:
DO NOT JUST SOLVE

$$14 = \frac{m}{3} + 6$$

3. Twice a number, increased by five, results in negative seven. Write and solve the equation.

4. Half of Carly's age added to two equals the age of her sister, Aria, who is 11. Write and solve an equation to determine the age of Carly.