Solving Equations Worksheet #1

Mrs. van der Vossen **Math 8**

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

1.
$$5.5x = 11.55$$

2.
$$\frac{y}{7.2} = -3.8$$

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3.
$$-2.4 = -0.8m$$

4.
$$90 = \frac{h}{-2.4}$$

5.
$$x + 2.4 = 3.5$$

6.
$$y - 2.2 = -8.3$$

7.
$$12.8 = 3.8x - 6.2$$

8.
$$-9.4 = -8.3 + \frac{x}{4.4}$$

9.
$$2.3x + 7.9 = 26.53$$

10.
$$-4.8y - 12.9 = -51.3$$

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

11.	$\frac{n}{7}$ —	5	=	-1
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12.
$$\frac{r}{-2} + 7 = -2$$

13.
$$-6 = 5 + \frac{x}{-3}$$

14.
$$8 - 2x = 10$$

15.
$$-18 = 2g + 18$$

16.
$$-16 = -4d - 6$$

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

1.	5x =	75

$$5x = 75$$

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 2. $-7 = \frac{t}{2}$

$$-7 = \frac{t}{2}$$

3.
$$-3x + 7 = -2$$

$$-3x + 7 = -2$$

3.
$$-3x + 7 = -2$$
 | $-3x + 7 = -2$ | 4. $\frac{m}{4} - 9 = -3$ | $\frac{m}{4} - 9 = -3$ | $\frac{m}{4} - 9 = -3$

$$\frac{m}{4} - 9 = -3$$

5.
$$3 + \frac{x}{-6} = 0$$
 $\frac{1}{1}$ $3 + \frac{x}{-6} = 0$

$$3 + \frac{x}{-6} = 0$$

6.
$$15 = 9 - 3w$$
 | $15 = 9 - 3w$

$$15 = 9 - 3w$$

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.