

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Translate & Solve

Class: \_\_\_\_\_

**Warm-Up:** Solve and justify/check the following equations.

1.  $4x + 6 = 14$

*Justify:*

2.  $-p + 7 = -13$

*Check:*

3.  $9 = \frac{r}{-3} + 4$

*Justify:*

4.  $-\frac{4}{3}n - \frac{2}{3} = \frac{5}{6}$

*Check:*

5.  $2.5x + 3.9x - 7 = 23.8$

*Justify:*

**Vocabulary:**

**Variable:** \_\_\_\_\_

**Coefficient:** \_\_\_\_\_

**Expression:** \_\_\_\_\_

**Equation:** \_\_\_\_\_

***Keys to Success:***

1. Define your variable.
2. Write an expression for each side of the equation.
3. Solve your equation.
4. Check your solution
5. Make sure you have answered the question(s).

**Example 1:** Two times a number decreased by three is five.

**Try Its:** Translate and solve the following.

a) The sum of twice a number and nine is forty-three.

b) Eight less than one-half a number is two.

**Example 2:** A baseball bat and 8 baseballs cost \$163.25. The bat costs \$106.45.

What is the cost of one baseball?

**Example 3:** Hugo received \$100 for his birthday. He then saved \$20 per week until he had a total of \$460 to buy a printer. How many weeks does it take him to save the money?

**Practice: Translate and solve the following word problems.**

a) A health club charges a \$50 initial fee plus \$2 for each visit. Mr. Blank has spent a total of \$144 at the health club this year. How many visits has he made?

b) Ray buys bottles of water at \$2.10 each and a large pizza at \$12.99. The total cost was \$21.39. How many bottles of water did he buy?