## Algebra Review #8 SHOW HOW YOU SOLVED EACH PROBLEM

1. Write a counter example (a number to prove it is not true) to the following statement.

"All whole numbers are natural."

2. Solve using the order of operations. Write answer in box provided.

 $102 - 2 \cdot 33 + (25 - 21)2 - 2$ 

4. Solve 
$$q^3$$
 when  $q = \frac{5}{6}$ 

5. Solve the equation:

$$5(1 + 4n) = 2(3 + 10n)$$

3. Simplify by using the distributive property and combining like terms:

1 - 7y + 7y - 10	<i>x</i> + <i>x</i> + <i>x</i> + 5
-10(4v+2)+6x	$\frac{1}{9}(2x+4y)$

## 6.

Translate the following into either algebraic expressions or verbal expressions:

Twice the quantity of a number plus 8	The product of 4 and a number less than 6
$\frac{5}{n}-9$	$\frac{5}{n-9}$

7. What is the value of the following (pay attention to the values of the indexes and the radicands):

 $\sqrt{36} + \sqrt[3]{27}$ 

9. Simplify

$$\sqrt{12} + \sqrt{75}$$

8. Simplify the radical.

 $\sqrt[3]{3072y^6z^4}$ 

10. Write in simplest radical form.

 $\sqrt{22j} \cdot \sqrt{3j}$