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

## "A// whole numbers are natural."

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

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

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

| $1-7 y+7 y-10$ | $x+x+x+5$ |
| :---: | :---: |
|  |  |
| $-10(4 v+2)+6 x$ | $\frac{1}{9}(2 x+4 y)$ |

$\qquad$
4. Solve $q^{3}$ when $q=\frac{5}{6}$
5. Solve the equation:

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

6. 

Translate the following into either algebraic expressions or verbal expressions:

| Twice the quantity of <br> a number plus 8 | The product of 4 and <br> 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):

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

8. Simplify the radical.

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

9. Simplify

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

10. Write in simplest radical form.

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

