

**Algebra Review #9 *SHOW HOW YOU SOLVED EACH PROBLEM***

NAME \_\_\_\_\_

1. Place a check in each box that is true for each number:

	Natural	Integer	Whole	Rat.	Irr.	Real
-0.2						
$\sqrt{13}$						
$\frac{1}{6}$						
2						
0						

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

$$\frac{(37 - 26)^2 - 6}{32 \div 2^2 - (4^2 - 13)}$$

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

$6 - 10 + 7y - 6z + y$	$5h - 4(h + 2h)$
$2(-9v + 1) + 4v$	$\frac{3}{4}(8x + y)$

4. Solve  $q^3$  when  $q = \frac{1}{8}$

5. Solve the equation:

$$-13 = 5(1 + 4m) - 2m$$

6.

Translate the following into either algebraic expressions or verbal expressions:

Each piece of candy (c) costs \$0.79	140 students split amongst (x) classrooms
Three times the cost of a (y) car plus \$600	Double the amount she (spent) minus a \$40 coupon

7. What is the value of the following:

$$2\sqrt{54} + 2\sqrt{150}$$

8. Simplify the radical.

$$\sqrt[3]{4608f^5g^4j^2}$$

9. What is the value of the following:

$$\sqrt{343} - \sqrt{175}$$

10. Write in simplest radical form.

$$\sqrt{10} \cdot \sqrt{7}$$