Meramec College Algebra Quiz 1 Fall 2008

NAME: _____Score_____/10

Please **print** your name

1. The set of _____ numbers consists of all real numbers which cannot be written as fractions.

2. An equation is a mathematical statement which contains an _____ symbol.

3. A conditional equation is an equation which is _____ when some real numbers are substituted for the variables and is _____ when some real numbers are substituted for the variables.

4. A _____ of an equation in one variable is a number which makes the equation true when substituted for the variable.

5. T F The graph of $3x - 7 = 12$ is a line.

6. T F If the same non-zero real number is added to both sides of an equation the resulting equation is equal to the original equation.

7. T F If $5x + 7$ is added to both sides of the equation $3x^4 + 7x^3 + x = 7x^2 - 4x + 43$ to obtain the new equation $3x^4 + 7x^3 + 6x + 7 = 7x^2 + x + 50$, then the two equations have the same solution set.

8. Circle each Natural Number in the following list:

$$15 \quad \frac{3}{4} \quad \sqrt{8} \quad \sqrt{16} \quad 0 \quad -3 \quad \pi \quad -32.75$$

9. Circle each Rational Number in the following list.

$$15 \quad \frac{3}{4} \quad \sqrt{8} \quad \sqrt{16} \quad 0 \quad -3 \quad \pi \quad -32.75$$

10. Use the roster method to describe the set $\{x | x \epsilon Z \text{ and } |x| < 4\}$