Meramec College Algebra Quiz 2 Solution Spring 2008

NAME: _____Score_____/10

Please **print** your name

SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION

1. The set of Rational Numbers consists of all numbers which can be written as fractions.

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

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

4. The graph of an equation consists of all the points, and only those points, whose coordinates are solutions of the equation.

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 $\{\ |\ \ |\ |\ < 4\}$ = { -3, -2, -1, 0, 1, 2, 3 }