

NAME: _____ Score _____/10

Please **print** your name

SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION

- The set of **Rational** Numbers consists of all numbers which can be written as fractions.
- An equation is a mathematical statement which contains an **equal** symbol.
- 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.
- The **graph** of an equation consists of all the points, and only those points, whose coordinates are solutions of the equation.
- T **F** The graph of $3x - 7 = 12$ is a line.
- 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.
- 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.
- Circle each Natural Number in the following list:

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

- Circle each Rational Number in the following list.

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

- Use the roster method to describe the set $\{ x \mid |x| < 4 \} = \{ -3, -2, -1, 0, 1, 2, 3 \}$