

NAME: _____ Score _____/10

Please **print** your name

1. The set of **irrational** numbers consists of all real numbers which cannot 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. A **solution** 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 $\frac{3}{4}$ $\sqrt{8}$ **$\sqrt{16}$** 0 -3 π -32.75

9. Circle each Rational Number in the following list.

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

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

$\{-3, -2, -1, 0, 1, 2, 3\}$