

NAME: _____ Score _____/10

Please **print** your name

1. The process to solve a linear equation in one variable is to generate a sequence of equations each **equivalent** to the previous equation until a simplest equation is obtained.
2. An equation is a mathematical statement which contains an **equal** symbol.
3. The norm of $7 - 5i$ is $7^2 + (-5)^2 = 74$
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 $5x + 1 = 0$ is a line.
6. T **F** If both sides of an equation are multiplied by the same non-zero real number, the resulting equation is equal to the original equation. (Read carefully)
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. If 2 is a solution of a particular equation and $\sqrt{2}$ is not a solution of that equation, then the equation is a **conditional** equation.
9. Circle each Rational Number in the following list.

125 $\frac{13}{4}$ $\sqrt{12}$ $\sqrt{9}$ 0 -11 π -384.7587

10. Use the roster method to describe the set $\{x|x \in N \text{ and } |x| < 4\} = \{1, 2, 3\}$