

NAME: \_\_\_\_\_ Score \_\_\_\_\_/10

Please **print** your name

1. The definitions used in mathematics are **stipulative** definitions.
2. A linear equation in one variable is an equation which can be written in the form  **$ax + b = 0$** .
3. Write a Whole number which is not a Natural number. **0**
4. 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.
5. **T**   **F**   If any expression is added to both sides of an equation the resulting equation is equivalent to the original equation.
6. **T**   **F**   If both sides of an equation are multiplied by the same expression, the resulting equation is equivalent to the original equation.
7. **T**   **F**   Two equations are equivalent if they have the same solution sets.
8. **T**   **F**   Two equations are equal if they have the same solution sets.
9. **T**   **F**   A real number which is not rational is irrational.
10. Which of the following are linear equations in one variable?
  - a.  $3x - 7 = 2x + 12$
  - b.  $\sqrt{7}x + 1 = 0$
  - c.  $x^2 = 3$
  - d.  $\frac{2x}{5} + \sqrt{3} = \frac{3}{\sqrt{2}}x$
  - e.  $\sqrt{x} = 5$