

NAME: _____ Score _____/10

Please **print** your name**No Decimals No mixed numbers No complex fractions No boxed or circled answer Show Work**

1. A **binary operation** is a calculation involving two operands.
2. 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.
3. If both sides of an equation are multiplied by the same **non zero real number** the resulting equation is equivalent to the original equation.
4. The collection of all solutions of an equation is called the **solution set** of the equation.
5. Definitions used in mathematics are **stipulative** definitions.
6. The statement: "If a , b , and c are real numbers such that $a = b$ and $b = c$, then $a = c$." is called The **Transitive** Property.
7. Two equations are equivalent if they have the same **solution set**
8. List the elements of the set $\{x \mid x \text{ is a positive integer such that } x \leq 2 \text{ or } 5 < x < 7\}$.
1, 2, 6
9. List the integers in the interval $[-3, 3)$.
-3, -2, -1, 0, 1, 2
10. F is the set of irrational numbers. Use the roster method of writing sets to complete the statement $\mathbf{Q} \cap \mathbf{F} = \emptyset$.