

NAME: _____ Score _____/10

Please **print** your name

1. Write $[-4, 8]$ with set builder notation.

$$[-4, 8] = \{x \mid -4 \leq x \leq 8\}$$

2. Complete this chain of subsets $N \subset W \subset Z \subset Q \subset R \subset C$.

3. The set of Rational Numbers consists of all numbers **which may be written as fractions**.

4. The multiplicative inverse of a complex number $a + bi$ is $\frac{a - bi}{a^2 + b^2}$.

5. The **graph** of an equation consists of all the points, and only those points, whose coordinates are solutions of the equation. **(Solution or solution set will not be accepted this time.)**

6. Two equations are equivalent if **they have the same solution sets**.

7. 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.

8. The formula for the volume of a cone with radius r and height h is $V = \frac{1}{3}\pi r^2 h$.

9. The conjugate of the complex number $-2 + 5i$ is **$-2 - 5i$** .

10. Sketch the graph of $(2, 7)$. 