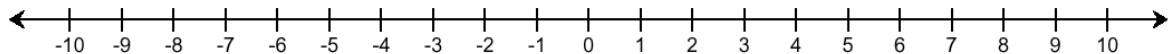


NAME: _____ Score _____/10

Please **print** your name**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION****NO DECIMAL APPROXIMATIONS. NO MIXED NUMBERS.**

1. (1 pt.) An inequality is a mathematical statement which contains an _____ symbol.
2. (1 pt.) A number (or numbers) that makes an inequality _____ when substituted for the variable (or variables) is called a solution of the inequality.
3. (1 pt.) The solution set of a compound inequality formed with the word **or** is the _____ of the solution sets of the two inequalities.
4. (1 pt.) T F $5 \notin \mathbb{Q}$
5. (1 pt.) T F $5 \in \mathbb{N}$
6. (1 pt.) T F $5 \subset \mathbb{N}$
7. (1 pt.) A _____ in one variable is an inequality that can be written in the form $ax + b < 0$ (or $ax + b > 0$) where a and b are real numbers with a not zero.

8. (1 pt.) Sketch the graph of $\{x \mid x \in \mathbb{N} \text{ and } 3 \leq x < 5\}$



9. (1 pt.) Solve the equation $3x + 2 = \sqrt{7}x - 3$

10. (1 pt.) Solve the equation $5x - 3 = 7 - 8x$