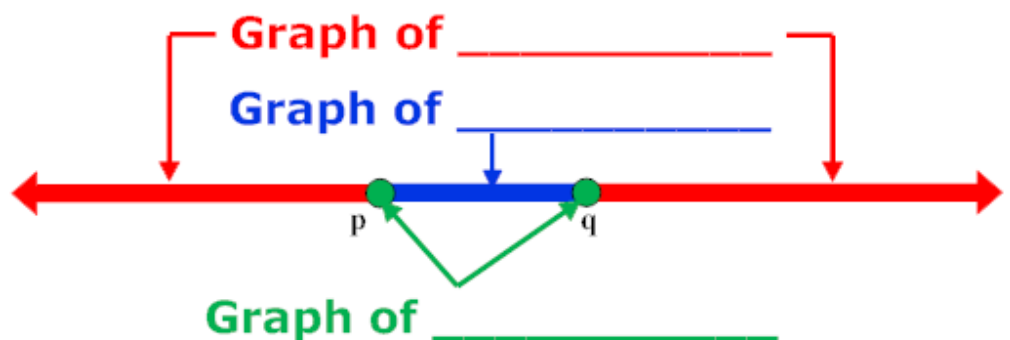


NAME: _____ Score _____/10

Please **print** your name**SHOW ALL YOUR WORK IN A NEAT AND ORGANIZED FASHION**

- The graph of an equation is the _____ between the graph of the corresponding two inequalities.
- When considering equations of the type $|ax + b| = k$, the _____ dictates that we consider the three possibilities $k < 0$, $k = 0$, and $k > 0$.
- If A is the solution set of $|ax + b| < k$, B is the solution set for $|ax + b| = k$, and C is the solution set for $|ax + b| > k$, then the union $A \cup B \cup C =$ _____
- If A is the solution set of $|ax + b| < k$, B is the solution set for $|ax + b| = k$, and C is the solution set for $|ax + b| > k$, then the intersection $A \cap B =$ _____.
- If A is the solution set of $|ax + b| < k$, B is the solution set for $|ax + b| = k$, and C is the solution set for $|ax + b| > k$, then the intersection $A \cap B =$ _____.
- Write $|3x - 8| < 11$ in compact compound form.
- (3 pts) Complete the following graph by inserting one of $|ax + b| < k$, $|ax + b| = k$, or $|ax + b| > k$ in the blanks.



- Complete the definition of absolute value. $|x| = \begin{cases} \text{_____} \\ \text{_____} \end{cases}$