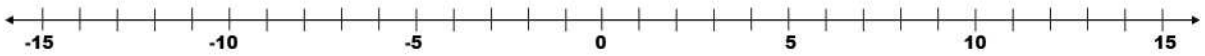
MasterMath

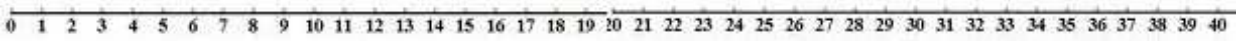
Name _____

Solving and Graphing Compound Inequalities Date _____

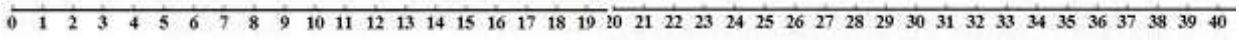
1. **Translate into an Inequality, and then graph: All real numbers that are less than 8 and greater than -12.**



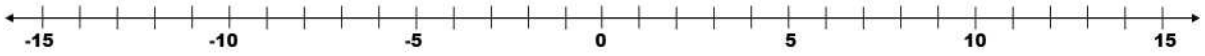
2. **In order to play in the Junior Basketball League, players need to be at least 13 years old, but less than 18 years old. Translate into an Inequality and then graph.**



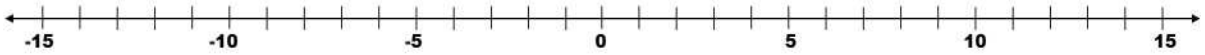
3. **We only accept patients who are either older than 14 or younger than 9. Translate into an Inequality and then graph.**



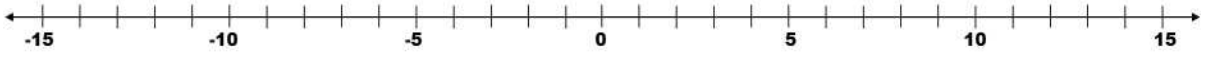
4. **Solve and graph: $4 > x + 2 > -6$**



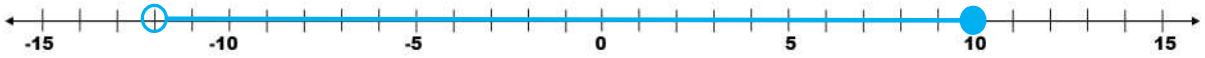
5. **Solve and graph: $-9 \leq 5 - 2x \leq 19$**



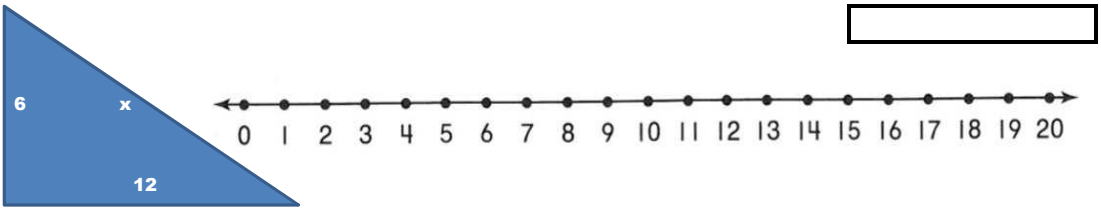
6. **Solve and graph: $-2x > 6$ or $x - 3 > 11$**



7. **Write the Compound Inequality that is described in this graph:**



8. **The sum of the lengths of any two sides of a triangle is greater than the length of the third side. The perimeter of this triangle is greater than 23. Write a Compound Inequality that describes x, and then graph:**



9. **The sum of three times a number and 6 is at least 15 and at most 18. Write and solve a Compound Inequality that describes this situation, and then graph the Inequality.**