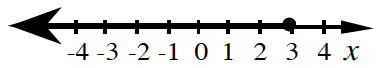
9-44) Reflection of the Human Number Line

9-45) Based on observations from the Human Number Line:

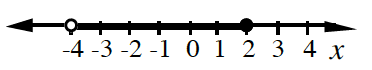
a.) Compare the solutions to an inequality (like ) with that of an equation ( like ). What is different? What causes this to happen?

b.) How many solutions does an inequality such as have?

c.) How is the result of different from the other inequalities? What about the result of ?

9-46) Write an inequality that represents the solution set on each number line. Highlight the number lines, as I have.

c.)

 d.)

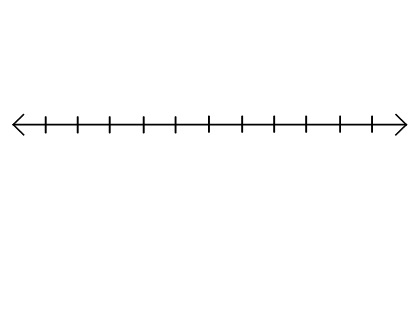
9-47) Solving a linear inequality

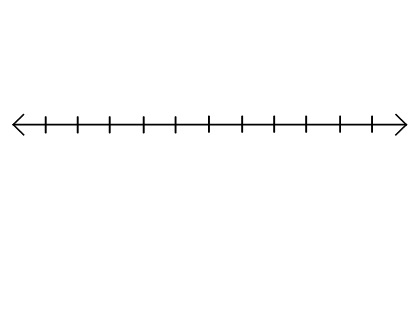
a.) How many solutions are there?

b.) What is the smallest solution for *x*? This point is called a **boundary point**.

c.) What is the significance of the boundary point? What is its relationship with the inequality 2*x* − 5 > 3?

d.) Write an inequality that represents the solutions for *x*. On a number line, highlight the solutions for *x*. Be ready to share your number line with the class.



9-48) Your Turn: Solve this linear inequality: