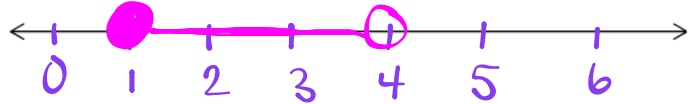


{

"AND"
Compound Inequalities:

1) Graph: $1 \leq x < 4$



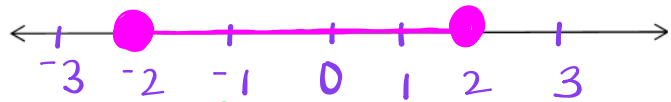
- a) State all the integers that are included in the solution set: {1, 2, 3}
 b) State a few numbers that are included in the solution set: 1.5, 2.5

2) Graph: $-1 < x < 3$



- a) State all the integers that are included in the solution set: {0, 1, 2}
 b) State a few numbers that are included in the solution set: -0.5, 0.8, 1.7

3) Graph: $-2 \leq x \leq 2$



- a) State all the integers that are included in the solution set: {-2, -1, 0, 1, 2}
 b) State a few numbers that are included in the solution set: -2, -1.5, 1.5, 2

Interval Notation: is another way to write a set of numbers when you are using all real numbers in a set.

We use a (or) when we **do not** include a number and we use a [or] when we **do include** a number.

<, >
≤, ≥

Write the following using Interval Notation: (lower boundary, upper boundary]

4) $2 \leq x < 4$ [2, 4)

5) $6 < x < 9$ (6, 9) **I**

6) $-3 \leq x \leq 4$ [-3, 4]

7) $-2 < x \leq 5$ (-2, 5]

8) State the integers that are in: (5, 9] 6, 7, 8, 9

9) State the integers that are in: (4, 6) 5

