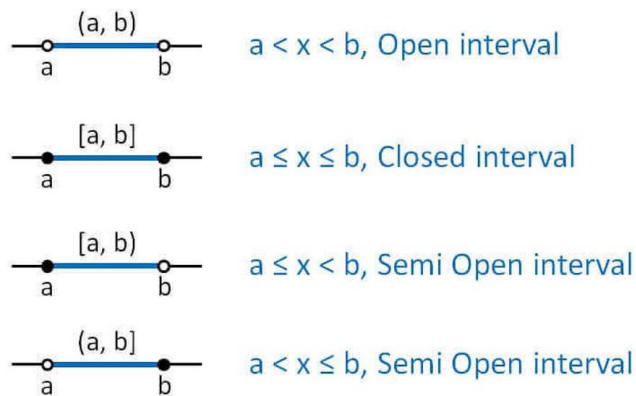


Interval notation

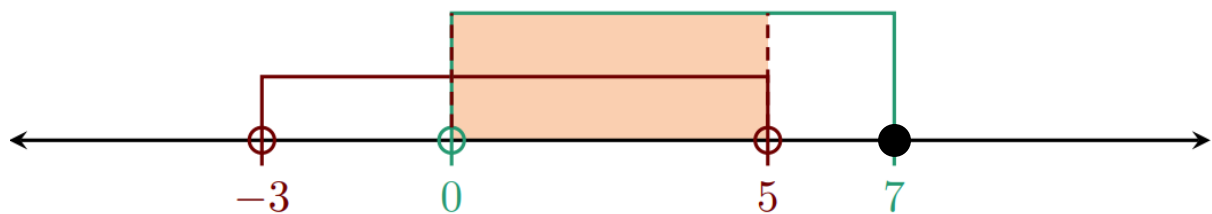


Example)



$$-3 < x < 5 \text{ or } 0 < x \leq 7$$

$$-3 < x < 5 \cup 0 < x \leq 7$$



$$-3 < x < 5 \text{ and } 0 < x \leq 7$$

$$-3 < x < 5 \cap 0 < x \leq 7$$

Exercise) Show this on the number line.

1. $-3 < x < 2$
2. $1 \leq x < 5$
3. $-3 < x < 2$ or $1 \leq x < 5$
4. $-3 < x < 2$ and $1 \leq x < 5$
5. $-3 \leq x < 0 \cup 3 \leq x < 5$
6. $-3 \leq x < 0 \cap 3 \leq x < 5$