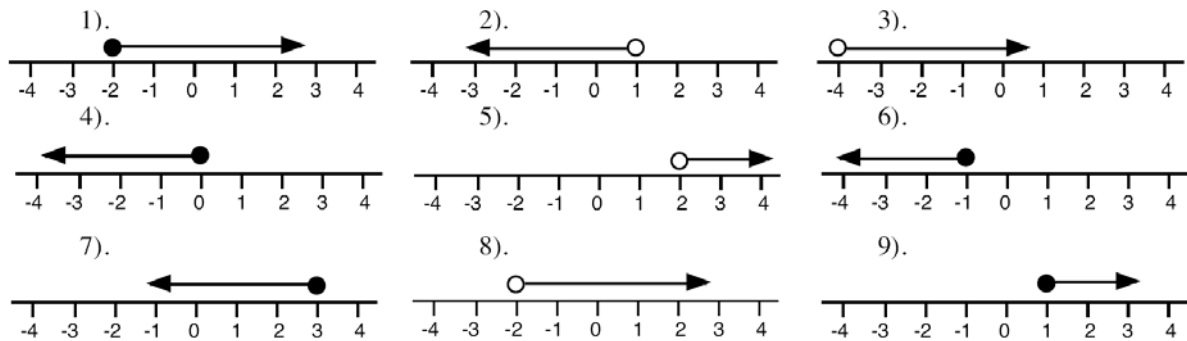


# Inequalities

**Part A** – For each diagram list the integers satisfied by the inequality AND write the inequality using algebra and the correct inequality sign.



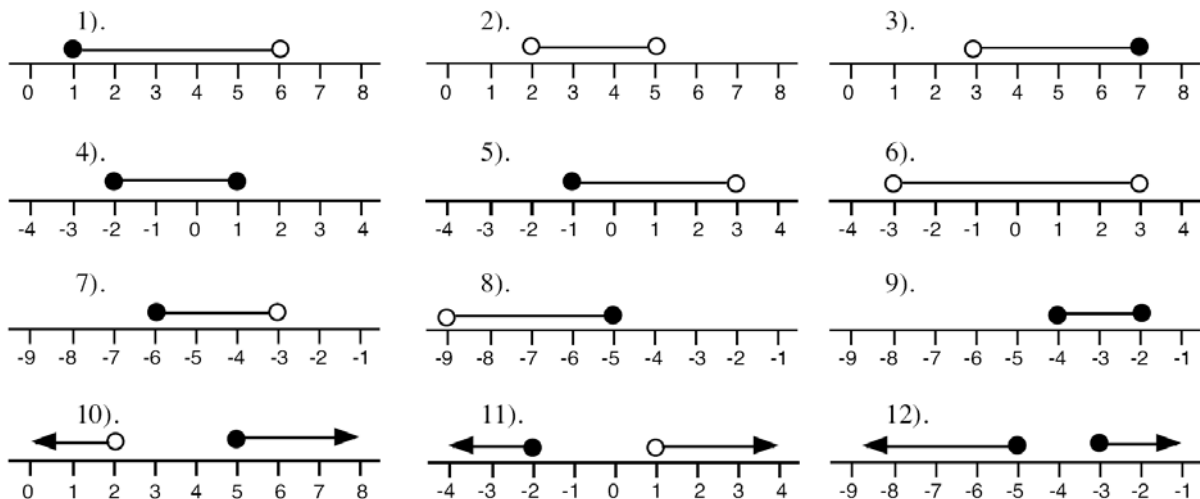
**Part B** – For the questions below draw representations on number lines like those above and list the first 5 integers that satisfy each inequality.

- 1).  $x \geq 3$     2).  $x < -1$     3).  $y \geq -2$     4).  $x > 1$     5).  $x \leq 0$   
 6).  $x > -6$     7).  $x \leq 4$     8).  $x \geq -5$     9).  $x \leq -2$     10).  $y > 2$

**Part C** – For the questions below draw representation on number lines like those above and list all integers that satisfy each inequality

- 1).  $x > 2, x \leq 7$     2).  $x \geq 1, x < 5$     3).  $x > 4, x < 9$   
 4).  $x \leq 0, x > -4$     5).  $x \leq 6, x \geq 0$     6).  $x < 2, x \geq -3$

**Part D** – Describe these inequalities using algebra



**Part E** – Draw representations of the following inequalities on a number lines.

- 1).  $1 \leq x \leq 4$     2).  $5 < x < 7$     3).  $3 < x \leq 7$     4).  $0 \leq x < 5$   
 5).  $6 > x \geq 4$     6).  $8 \geq x \geq 3$     7).  $4 \geq x > 0$     8).  $7 > x \geq 2$   
 9).  $-3 \leq x \leq 2$     10).  $-2 \leq x \leq 1$     11).  $-5 < x < -1$     12).  $-6 < x \leq -3$