

Solving inequality using addition and subtraction

1) $x+2 > -3$

2) $1 \geq x-9$

3) $x+4 < 3$

4) $x+3 > 7$

5) $m+8 \geq 12$

6) $-11 < y+5$

7) $x+4 < 5$

8) $-8 \geq d - 7$

9) $z - 15 > 72$

10) $h + 19 \leq 15$

11) $-45 > g - 16$

12) $f + 1 \geq -8$

13) $b + 2.5 \leq 2.5$

14) $a - 10.2 > 5.3$

15) $t - 7 < 3.4$

16) $18.1 \leq p - 7$

Answer Key

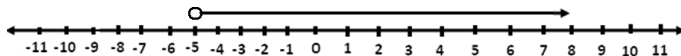
Solving inequality using addition and subtraction

1) $x + 2 > -3$

$x + 2 - 2 > -3 - 2$ *subtract 2 from both sides*

$x > -5$ *simplification*

solution: $x > -5$

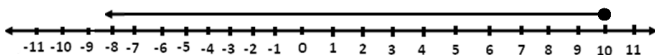


2) $1 \geq x - 9$

$1 + 9 \geq x - 9 + 9$ *add 9 on both sides*

$10 \geq x, x \leq 10$ *simplification*

solution: $x \leq 10$

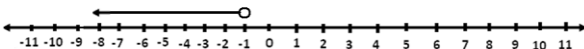


3) $x + 4 < 3$

$x + 4 - 4 < 3 - 4$ *subtract 4 from both sides*

$x < -1$ *simplification*

solution: $x < -1$

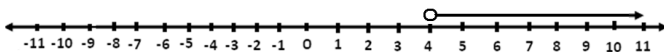


4) $x + 3 > 7$

$x + 3 - 3 > 7 - 3$ *subtract 3 from both sides*

$x > 4$ *simplification*

solution: $x > 4$

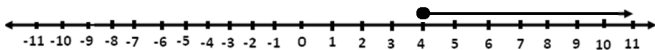


5) $m + 8 \geq 12$

$m + 8 - 8 \geq 12 - 8$ *subtract 8 from both sides*

$m \geq 4$ *simplification*

solution: $m \geq 4$

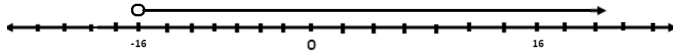


6) $-11 < y + 5$

$-11 - 5 < y + 5 - 5$ *subtract 5 from both sides*

$-16 < y$ *simplification*

solution: $-16 < y$

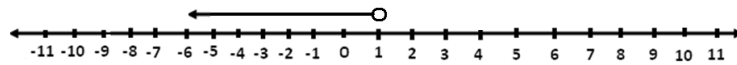


7) $x + 4 < 5$

$x + 4 - 4 < 5 - 4$ *subtract 4 from both sides*

$x < 1$ *simplification*

solution: $x < 1$

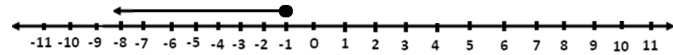


8) $-8 \geq d - 7$

$-8 + 7 \geq d - 7 + 7$ *add 7 to both sides*

$-1 \geq d$ *simplification*

solution: $d \leq -1$

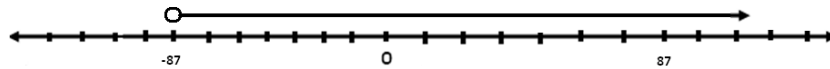


9) $z - 15 > 72$

$z - 15 + 15 > 72 + 15$ *add 15 on both sides*

$z > 87$ *simplification*

solution: $z > 87$

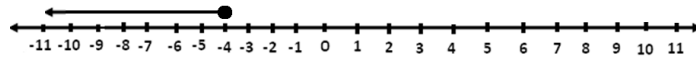


10) $h + 19 \leq 15$

$h + 19 - 19 \leq 15 - 19$ *subtract 19 from both sides*

$h \leq -4$ *simplification*

solution: $h \leq -4$

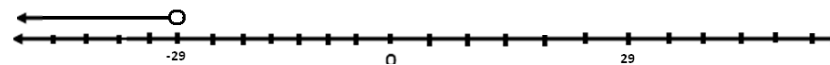


11) $-45 > g - 16$

$-45 + 16 > g - 16 + 16$ *add 16 on both sides*

$-29 > g$ *simplification*

solution: $g < -29$

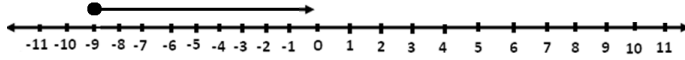


12) $f + 1 \geq -8$

$f + 1 - 1 \geq -8 - 1$ *subtract 1 from both sides*

$f \geq -9$ *simplification*

solution: $-9 \leq f$

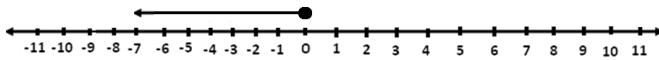


13) $b + 2.5 \leq 2.5$

$b + 2.5 - 2.5 \leq 2.5 - 2.5$ *subtract 2.5 from both sides*

$b \leq 0$ *simplification*

solution: $b \leq 0$

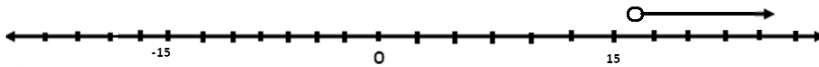


14) $a - 10.2 > 5.3$

$a - 10.2 + 10.2 > 5.3 + 10.2$ *add 10.2 on both sides*

$a > 15.5$ *simplification*

solution: $a > 15.5$

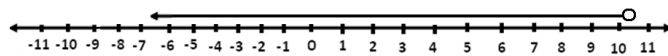


15) $t - 7 < 3.4$

$t - 7 + 7 < 3.4 + 7$ *add 7 on both sides*

$t < 10.4$ *simplification*

solution: $t < 10.4$



16) $18.1 \leq p - 7$

$18.1 + 7 \leq p - 7 + 7$ *add 7 on both sides*

$25.1 \leq p$ *simplification*

solution: $p \geq 25.1$

