

Solving Inequalities

Solve the following inequalities:

(1) $x + 5 < 1$

(2) $1 - 2x \geq 0$

(3) $3 + \frac{x}{2} < 6$

(4) $4 - 10x < 2(1 - x)$

(5) $-5x + 1 \leq 2 - x$

(6) $2x + 1 > \frac{7}{2} + \frac{4}{3}x$

(7) $3 < \frac{x+2}{3} \leq 5$

(8) $4 > 2 - x > 3$

$$(9) \frac{x^2 - 9}{x + 1} < 0$$

$$(10) x^2 + 5x + 1 < -5$$

$$(11) \frac{(x - 2)(x + 4)}{x + 7} > 0$$

$$(12) \frac{(x - 2)(x + 4)}{x + 7} \geq 0$$