



Guía de Ejercicio 1. Inecuaciones

Resuelve las siguientes inecuaciones

	Solución
1. $2(x + 1) - 3(x - 2) < x + 6$	$S = (1, +\infty)$
2. $\frac{3x + 1}{7} - \frac{2 - 4x}{3} \geq \frac{-5x - 4}{14} + \frac{7x}{6}$	$S = \left[\frac{1}{4}, +\infty\right)$
3. $6\left(\frac{x + 1}{8} - \frac{2x - 3}{16}\right) > 3\left(\frac{3}{4}x - \frac{1}{4}\right) - \frac{3}{8}(3x - 2)$	$S = \left(-\infty, \frac{5}{3}\right)$
4. $7x^2 + 21x - 28 < 0$	$S = (-4, 1)$
5. $2 - x^2 + 4x - 7 < 0$	$S = R$
6. $4x^2 - 16 \geq 0$	$S = (-\infty, -2] \cup [2, +\infty)$
7. $x^4 + 12x^3 - 64x^2 > 0$	$S = (-\infty, -16) \cup (4, +\infty)$
8. $x^4 - 25x^2 + 144 < 0$	$S = (-4, -3) \cup (-3, 3) \cup (3, 4)$
9. $(x^2 - 25)(x^2 + 9) \geq 0$	$S = (-\infty, -5] \cup [5, +\infty)$
10. $\frac{x^2 - 1}{-x^2 + 2x - 1} \leq 0$	$S = (-\infty, -1] \cup (1, +\infty)$
11. $\frac{x^2 - 1}{x^2 - 4} \leq 0$	$S = [-2, -1] \cup (1, 2)$
12. $\frac{2}{3}\left[x - \left(1 - \frac{x - 2}{3}\right)\right] + 1 \leq x$	$S = [-1, +\infty)$
13. $\frac{x^2 + 4}{x^2 - 4} \geq 0$	$S = (-\infty, -2) \cup (2, +\infty)$