

INECUACIONES

1. $x + 5 > 11$, Solution is: $(6, \infty)$
2. $5 - x \leq 12$, Solution is: $[-7, \infty)$
3. $4(x - 2) < 7$, Solution is: $(-\infty, \frac{15}{4})$
4. $7(3 - x) \geq 5$, Solution is: $(-\infty, \frac{16}{7}]$
5. $\frac{x-3}{2} - (\frac{2+x}{3}) > 3$, Solution is: $(31, \infty)$
6. $\frac{4-2x}{5} + \frac{x-2}{2} \leq -6$, Solution is: $(-\infty, -58]$
7. $\frac{5}{6}(3-x) - \frac{1}{2}(x-4) \geq \frac{1}{3}(2x-3) - x$, Solution is: $(-\infty, \frac{11}{2}]$
8. $\frac{3x+1}{4} - \frac{1}{3} \leq \frac{2}{15}(3x+2) + \frac{4(1-x)}{3}$, Solution is: $(-\infty, 1]$
9. $(x-3)^2 - (x-2)^2 < 5$, Solution is: $(0, \infty)$
10. $(4x-3)(2+x) > (3-2x)^2$, Solution is: $(\frac{15}{17}, \infty)$
11. $(x-1)^2 + (x+2)^2 > \frac{(2x-3)^2}{2}$, Solution is: $(-\frac{1}{16}, \infty)$
12. $\begin{cases} 3x-4 > x+6 \\ 2x+3 < x+17 \end{cases}$, Solution is: $(5, 14)$
13. $\begin{cases} 5x+1 > 2x+10 \\ x-5 \leq 15-3x \end{cases}$, Solution is: $(3, 5]$
14. $\begin{cases} 2x+3(x-1) \leq x+1 \\ 2(x+3) > x+2 \end{cases}$, Solution is: $(-4, 1]$
15. $\begin{cases} 2x-3 \leq 3x+7 \\ \frac{2x}{5} - \frac{x}{4} \geq \frac{2}{3} \end{cases}$, Solution is: $[\frac{40}{9}, \infty)$
16. $\begin{cases} \frac{x-1}{3} - \frac{x+3}{2} \leq x \\ \frac{4x-2}{4} - \frac{x-1}{3} \geq x \end{cases}$, Solution is: $[-\frac{11}{7}, -\frac{1}{2}]$
17. $\begin{cases} \frac{3(2-x)}{2} - x < \frac{16}{5} - \frac{x+1}{5} \\ \frac{x+4}{3} - \frac{x-5}{6} > 3 - \frac{2x-3}{18} \end{cases}$, Solution is: $(\frac{18}{5}, \infty)$
18. $\begin{cases} (x-2)^2 > (x+3)^2 \\ (x-3)(x+3) \leq (x-5)(x+6) \end{cases}$, No solution found.
19. $\begin{cases} (x-1)^2 - (x+3)^2 \leq 0 \\ x-3(x-1) \geq 3 \end{cases}$, Solution is: $[-1, 0]$