8 = |78| = 78 9 = |-1 1/2| = 7 1/2
10 = |-984,32| = 984,32 11 = |24| = 24 12 = |-476| = 476
13 = |139,2| = 139,2 14 = |12 1/6| = 12 1/6 15 = |-32 2/3| = 32 2/3
16 = |7,333| = 7,333 17 = |-2,13| = 2,13 18 = |-19| = 19
19 = |-6,5| = 6,5 20 = |-5/8| = 5/8

Operaciones valor absoluto

1 = |45+71| - 12 = |52| - 12 = 52 - 12 = 40
2 = ||19 - 200| = |-81| = 81
3 = |49|-7| = |-35| = 35
4 = 200 * |-2| = 200 * 2 = 400
5 = 356 + |-100| = 356 + 100 = 456
6 = |3-31| = |0| = |0| = 0 = ∅
7 = |200| - 50 = 200 - 50 = 150
8 = |-31 * 80 = 3 * 80 = 240
9 = |-350| / 10 = 350 / 10 = 35
10 = |-2 * 15| + 7 = |-30| + 7 = 30 + 7 = 37

Desigualdades de primer grado

① $3x < 10+5$ → $3x < 15$ → $3x < 15$ → $x > \frac{15}{3}$

$x > 5$ $(5, \infty)$

② $2x + 4 \geq 12$ → $2x + 4 \geq 12$

$2x \geq 12 - 4$

$2x \geq 8$

$x \geq \frac{8}{2}$

$x \geq 4$ $[4, \infty)$

③ $2x+5 > 11$

$2x > 11-5$

$2x > 6$

$x > \frac{6}{2}$

$x > 3$ $\quad (3, \infty)$

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④ $x-3 \leq 2$

$x \leq 2+3$

$x \leq 5$ $\quad (-\infty, 5]$

Desigualdades de segundo grado

① $x^2+4x+3 \geq 0$

$(x+3)(x+1)$

$x^2+3x+x+3$

x^2+4x+3

$x+3=0$ $\quad x+1=0$

$x=-3$ $\quad x=-1$

$(-\infty,-3)\ (-3,-1)\ (-1,\infty)$

$(-2+3)(-2+1) = (1)(-1) = -1$

$(-\infty,-3) \cup (-1,\infty)$

② $x^2+2x-6 > 0$

$(x+3)(x-2)$

$x^2-2x+3x-6$

x^2+x-6

$x+3=0$ $\quad x-2=0$

$x=-3$ $\quad x=2$

$(-\infty,-3) \cup (2,\infty)$

③ $4x^2+10+75 \leq 0$ $\quad (-\infty, \frac{-5}{2})$

$(2x+5)(2x+5)$

$4x^2+10x+10x+25$

$2x+5=0$ $\quad 2x+5=0$

$2x=-5$ $\quad 2x=\frac{-5}{2} \leq 0$

$x \leq \frac{-5}{2}$

Valor absoluto

1 = $|x-3| < 5$

$-5 < x-3$ $\quad$ $x-3<5$

$-5+3<x$ $\quad$ $x<5+3$

$-2<x$ $\quad$ $x<8$

2 = $|2x+1| \geq 3$

$-(2x+1) \geq 3$ $\quad$ ~~$2x+1$~~ $\quad$ $2x+1 \geq 3$

~~$-3 \geq 2x+1$~~ $\quad$ $-2x-1 \geq 3$ $\quad$ $2x \geq 3-1$

~~$-3-1 \geq$~~ $\quad$ $-2x \geq 3+1$ $\quad$ $2x \geq 2$

$-2x \geq 4$ $\quad$ $x \geq \frac{2}{2}$

$x \geq \frac{4}{-2}$ $\quad$ $x \geq 1$

$x \leq -2$

$(-\infty, -2) \cup (1, \infty)$

3 = $|x+4| < 2$

$-2 < x+4$ $\quad$ $x+4<2$

$-2-4 < x$ $\quad$ $x < 2-4$

$-6 < x$ $\quad$ $x<-2$

4 = $|3x-5| \geq 4$

$-(3x-5)$ $\quad$ $3x-5 \geq 4$

$-3x+5 \geq 4$ $\quad$ $3x \geq 4+5$

$-3x \geq 4-5$ $\quad$ $3x \geq 9$

$x \geq \frac{-1}{-3}$ $\quad$ $x \geq \frac{9}{3} = 3$