

Disequazioni semplici

- 72** $(x-1)(x+1) - (x-3)^2 < 3$ $\left[x < \frac{13}{6} \right]$
- 73** $(x-1)^2 - 3x < (x-3)(x+3)$ $[x > 2]$
- 74** $4(5x-1) + 2(3x+1)^2 > 3x(6x+5) - 2x - 3$ $\left[x > -\frac{1}{19} \right]$
- 75** $(2x-1)^2 - 3(2+x) \leq (2x+3)(2x-3) + 2(x+3)$ $\left[x \geq -\frac{2}{9} \right]$
- 76** $4(2x-1) - x + (2x-1)^2 > 4(x-2)^2 - 12(x-1)$ $[x > 1]$
- 77** $(3x-1)(3x+1) - \left(1 - \frac{1}{2}x\right)^2 + \frac{1}{4}(x+1)^2 - 9x^2 < 0$ $\left[x < \frac{7}{6} \right]$

Disequazioni fratte

- 112** $\frac{10}{7x} > \frac{5}{14}$ $[0 < x < 4]$ **121** $1 - \frac{3}{x+2} < \frac{3x}{6+3x}$ $[x > -2]$
- 113** $\frac{2}{x} < \frac{4}{3x}$ $[x < 0]$ **122** $\frac{x-3}{2x-1} + 1 \leq \frac{3}{2}$ $\left[x > \frac{1}{2} \right]$
- 114** $\frac{6x}{x-1} < 1$ $\left[-\frac{1}{5} < x < 1 \right]$ **123** $\frac{x-1}{2x} \cdot \frac{1}{2x-2} \leq 2$ $\left[x < 0 \vee x \geq \frac{1}{8} \wedge x \neq 1 \right]$
- 115** $\frac{x+1}{x-1} > \frac{3}{4}$ $[x < -7 \vee x > 1]$ **124** $\frac{6+(3-x)^2}{x+2} - 1 \geq \frac{2-x^2}{-x-2}$ $\left[-2 < x < \frac{15}{7} \right]$

Sistemi di disequazioni

- 168** $\begin{cases} 6x-1+2x(x-2) - x^2 \geq x^2+1 \\ 2x-6 > x+1 \end{cases}$ $[x > 7]$
- 169** $\begin{cases} \frac{1}{2}(2+x) - 1 > -\frac{1}{3}(x-1) \\ \frac{1}{5}(x+10) < \frac{1}{3}(x+6) \end{cases}$ $\left[x > \frac{2}{5} \right]$
- 170** $\begin{cases} 2x(x-1) - x^2 + x - 3 \leq x(x-2) + 7 \\ 2x+3 - x + x^2 > x(x+2) - 3 \end{cases}$ $[x < 6]$

Disequazioni di 2° grado

$$\mathbf{205} \quad \frac{x^2 + 4x - 5}{2x - 3} < 0 \quad \left[x < -5 \vee 1 < x < \frac{3}{2} \right]$$

$$\mathbf{206} \quad \frac{x^2 - 2x + 1}{6x} > 0 \quad [x > 0, x \neq 1]$$

$$\mathbf{207} \quad \frac{2x - 8}{(2x - 1)\left(x + \frac{1}{2}\right)} \geq 0 \quad \left[-\frac{1}{2} < x < \frac{1}{2} \vee x \geq 4 \right]$$

$$\mathbf{228} \quad 3 - x \geq \frac{4}{x + 2}$$

$$[x < -2 \vee -1 \leq x \leq 2]$$

$$\mathbf{229} \quad x \leq \frac{6}{x - 1}$$

$$[x \leq -2 \vee 1 < x \leq 3]$$

$$\mathbf{230} \quad 4 - x > \frac{10}{x + 3}$$

$$[x < -3 \vee -1 < x < 2]$$