■ Inéquations réductibles au premier degré

Résoudre

1) $(3-x)\left(2x^2+x-1\right) \leq 0$

2) $\frac{5x^2+9x-2}{3-4x} > 0$

3) $\frac{5x^2}{(x-7)(x^2-x+1)} > 0$

4) $2x+1 > \frac{1}{1-x}$

5) $\frac{(5-3x)(x^2-9)}{2x+3} \geq 0$

6) $\frac{4x^2-9}{x+3} \geq 0$

7) $3-4x \leq \frac{2}{x}$

8) $3x+1 > \frac{x+1}{x}$

9) $\frac{x(x^2-9)}{x^2+4x+4} \leq 0$

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

Solutions:

1) $S = [\ -1\ ,\ \frac{1}{2}\ ]\ \cup\ [\ 3, \longrightarrow$

2) $S = \longleftarrow\ ,\ -2[\ \cup\ ]\ \frac{1}{5}\ ,\ \frac{3}{4}\ [$

3) $S =]\ 7, \longrightarrow$

4) $S =]\ 0\ ,\ \frac{1}{2}\ [\ \cup\ ]\ 1, \longrightarrow$

5) $S = [\ -3\ ,\ -\frac{3}{2}\ [\ \cup\ [\ \frac{5}{3}\ ,\ 3\ ]$

6) $S =]\ -3\ ,\ -\frac{3}{2}\ ]\ \cup\ [\ \frac{3}{2}, \longrightarrow$

7) $S =]\ 0, \longrightarrow$

8) $S =]\ -\frac{1}{\sqrt{3}}\ ,\ 0\ [\ \cup\ ]\ \frac{1}{\sqrt{3}}, \longrightarrow$

9) $S = \longleftarrow\ ,\ -3]\ \cup\ [\ 0\ ,\ 3\ ]$

10) $S = \longleftarrow\ ,\ \frac{1}{2}[$