■ Inéquations réductibles au premier degré

Résoudre

1) $(3-x)\left(4x^2-1\right) \leq 0$

2) $\frac{3x^2+8x-3}{1-5x} > 0$

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

4) $3x+1 > \frac{2}{x+2}$

5) $\frac{(3x+1)(x^2-6x+9)}{x^2+3} \geq 0$

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

7) $1-2x \leq \frac{3}{x}$

8) $2x+3 > \frac{x+4}{x}$

9) $-\frac{2x(x^2-1)}{x^2+x-2} \leq 0$

10) $(x-1)(2x+1) < (x+1)(3x-1)$

Solutions:

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

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

3) $S = \longleftarrow , -3[$

4) $S =] -\frac{7}{3} , -2 [\cup] 0, \longrightarrow$

5) $S = [-\frac{1}{3}, \longrightarrow$

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

7) $S =] 0, \longrightarrow$

8) $S =] -2 , 0 [\cup] 1, \longrightarrow$

9) $S =] -2 , -1] \cup [0, \longrightarrow$

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