

■ Inéquations réductibles au premier degré

Résoudre

1) $(3 - x)(2x - 1) \leq 0$

2) $(3 - 4x)(5x - 7) > 0$

3) $-5(x - 7)(x - 1)x \geq 0$

4) $(5 - x)(2x + 1)^2 > 0$

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

6) $\frac{4x^2 - 9}{x + 1} \geq 0$

7) $\frac{(3 - 4x)(1 - x^2)}{x(x + 2)} \leq 0$

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

9) $x(x^2 - 9) \leq 9 - x^2$

10) $(x - 1)(x + 4) \geq (x - 2)(x + 1)$

Solutions:

$$1) S = \leftarrow, \frac{1}{2}] \cup [3, \rightarrow$$

$$2) S =] \frac{3}{4}, \frac{7}{5} [$$

$$3) S = \leftarrow, 0] \cup [1, 7]$$

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

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

$$6) S = [-\frac{3}{2}, -1[\cup [\frac{3}{2}, \rightarrow$$

$$7) S = \leftarrow, -2[\cup [-1, 0[\cup [\frac{3}{4}, 1]$$

$$8) S = \leftarrow, -\frac{2}{3}[\cup]-\frac{1}{3}, 0[\cup]3, \rightarrow$$

$$9) S = \leftarrow, -3] \cup [-1, 3]$$

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