

Compti
es 457

$$\frac{1}{x-1} \geq \frac{x-1}{x^2-1}$$

$$\frac{x+1}{(x-1)(x+1)} \geq \frac{x-1}{(x-1)(x+1)}$$

$$\frac{x+1 - x+1}{x^2-1} \geq 0$$

es 464

$$\frac{x}{x-3} + \frac{7x+4}{x^2-6x+9} < 0$$

$$\frac{x^2-3x+7x+4}{x^2-6x+9} < 0$$

$$\frac{x^2+4x+4}{x^2-6x+9} < 0$$

$$N > 0 \quad x^2+4x+4 > 0$$

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$$(x+2)^2 > 0 \quad \forall x \in \mathbb{R}, x \neq -2$$

$$(x+2)^2 > 0 \quad \forall x \in \mathbb{R}, x \neq -2$$

$$x^2-6x+9 > 0$$

$$(x-3)^2 > 0$$

$$\forall x \in \mathbb{R}, x \neq 3$$

NON C'È MAI

$$S: \emptyset$$

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es 474

$$\frac{2x^2}{x^3+1} - \frac{x}{x^2-x+1} \leq \frac{1}{x-1}$$

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

$$\frac{2x^2 - x^2 - 1}{x^3 + 1} \leq$$

$$(x^2+1) \cdot (x-1)$$

es 426

$$\frac{x^3(4-x)^4}{(2x-1)^5(1-x)^2} \leq 0$$

$$\frac{x^3(4-x)^4}{(2x-1)^5(1-x)^2}$$

$N_1 > 0$

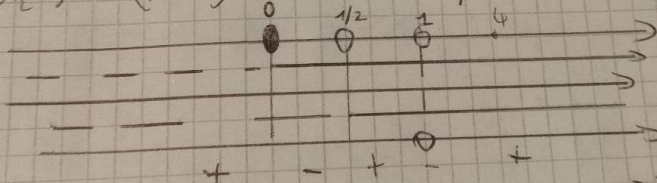
$$1) x \geq 0$$

$$(4-x)^4 \geq 0 \quad \forall x \in \mathbb{R} \quad x_4$$

$$0,30 (2x-1)^5 > 0$$

$$2x-1 > 0 \Rightarrow x > \frac{1}{2}$$

$$0,2 > 0 (1-x)^2 > 0 \quad \forall x \in \mathbb{R}, x \neq 1$$



$$S: \left\{ 0 \leq x \leq \frac{1}{2} \vee \frac{1}{2} < x < 1 \vee x = 4 \right\}$$

$$S: \left[0, \frac{1}{2} \right] \cup \{4\}$$

5430

$$\frac{x^3 + 4x}{9x^2 - 25} < 0$$

$$N > 0 \quad (x^2 + 4x) > 0$$

$$x(x^2 + 4) > 0$$

$$1) \quad x > 0$$

$$2) \quad (x^2 + 4) > 0 \quad \forall x \in \mathbb{R}, \quad x \neq \pm 2$$

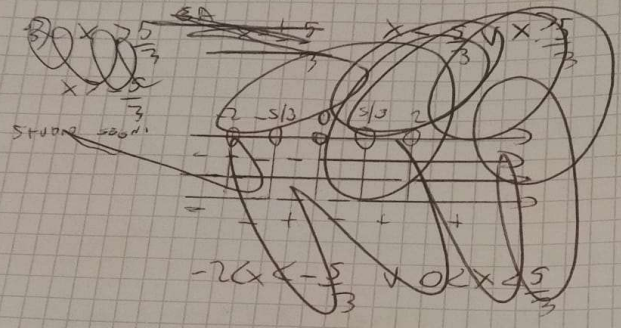
$$D) \quad 9x^2 - 25 > 0$$

$$\text{or } 9x^2 = 25 \quad 3x = \pm 5$$

$$5/3 \quad -5/3$$

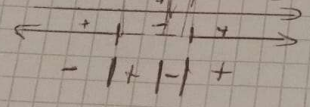
$$x < -\frac{5}{3} \vee x > \frac{5}{3}$$

$$(x^3 + 4x) > 0$$



STUDIO 5430

$$S: \left\{ x < -\frac{5}{3} \vee 0 < x < \frac{5}{3} \right\}$$



$$S:]-\infty; -\frac{5}{3}[\cup]0; \frac{5}{3}[$$

ES 434

$$\frac{x^3 - 3x^2 + 2x}{x+1} \leq 0$$

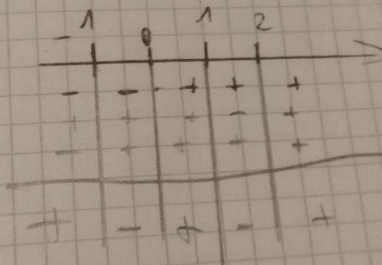
$$x(x^2 - 3x + 2) \geq 0$$

$$1) x \geq 0$$

$$x < 2$$

$$3) x > -1$$

$$x \leq 1 \vee x \geq 2$$



$$x < -1 \vee x > 2$$

$$-1 < x \leq 0 \vee 1 \leq x \leq 2$$

$$S:]-1; 0] \cup [1; 2]$$