

Compiti su disequazioni

ES 609
 (B) $\forall x \in \mathbb{R}$ b. $\{x \in \mathbb{R} \mid cx \neq 1/2 \mid x=0, x \in \mathbb{R} \text{ e } \exists f \forall x \in \mathbb{R}$

ES 624

$$|6-x| > 3$$

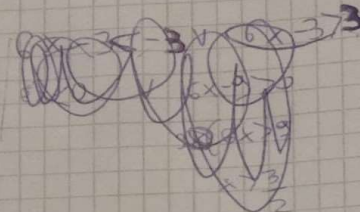
6

$$6-x > 3$$

$$6-x = \pm 3$$

$$x = +3$$

$$x = +9$$



$$\{x \mid x < 3 \vee x > 9\}$$

ES 628

$$|x^2+1|+2 > 0$$

$$|x^2+1| > -2 \quad \forall x \in \mathbb{R}$$

ES 631

$$|8x^2-1| \geq 1$$

$$8x^2-1 \geq 1$$

$$8x^2 \leq 0 \vee 8x^2 \geq 2$$

$$x=0 \quad x \leq -\frac{1}{2} \vee x \geq \frac{1}{2}$$

$$\{0\} \cup]-\infty, -\frac{1}{2}] \cup [\frac{1}{2}, +\infty[$$

633

$$x^2-3x+2 > 2$$

$$x^2-3x-4 \vee x^2-3x > 0$$

$$x^2-3x+4 > 0 \vee x^2-3x > 0$$

$$\{x \mid x < 0 \vee x > 3\}$$

$$8x^2-1 = -1$$

$$x=0$$

$$8x^2 = 2$$

$$4x^2 = 1$$

$$x^2 = \frac{1}{4}$$

$$x = \pm \frac{1}{2}$$

$$x_{1,2} = 3 \pm \sqrt{9-16} \text{ n.p.}$$

$$x(x-3) \leq 0 \quad x < 0 \vee x > 3$$

$$\left| \frac{2x-1}{x-4} \right| + 2 > 0$$

$$\left| \frac{2x-1}{x-4} \right| > -2$$

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

$$\frac{2x-1}{x-4} < 2$$

$$x < \frac{1}{2}$$

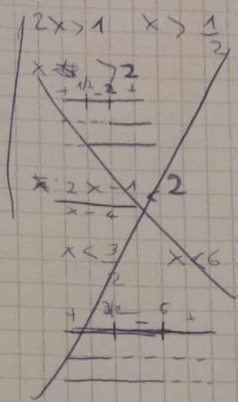
$$x > 2$$

$$+3 < x < 6$$

$$x-4 \neq 0$$

$$x \neq 4$$

$$S: \{x \in \mathbb{R}, x \neq 4\}$$

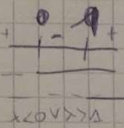


es 636

$$\frac{|x|-1}{x} > 0$$

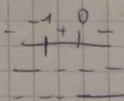
$$x-1 > 0$$

$$x > 1$$



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

$$x < -1$$



$$x < -1 \vee x > 0$$

es 642

$$2 + |3x-4| < 1$$

$$|3x-4| < -1$$

kein S: ∅

es 644

$$|4-5x| < 1$$

$$4-5x < 1$$

$$4-5x > -1$$

$$4-5x < -1$$

$$4-5x > -1$$

$$-5x < -3$$

$$4+5x < 1$$

7.5



$$\frac{3}{5} < x < 1$$