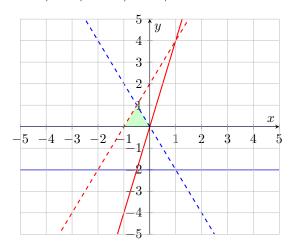
$$|x-1| + x > |2x+1|$$

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

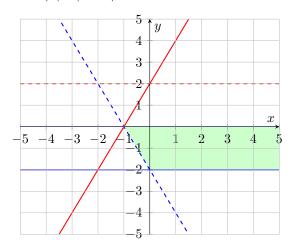


$$x\in (-1,0)$$

2.)

$$|x| < |x+2|$$

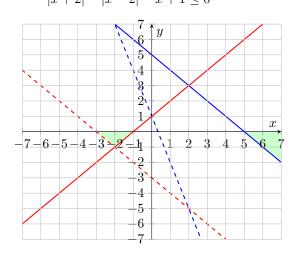
$$|x| - |x+2| < 0$$



$$x \in (-1, \infty)$$

$$|x+2| - |x-2| \le x-1$$

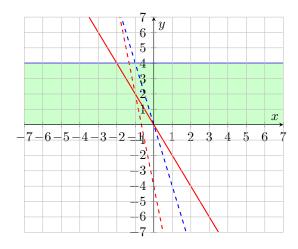
$$|x+2| - |x-2| - x + 1 \le 0$$



$$x \in [-3,-1] \cup [5;\infty)$$

$$2|x+1| > 3x - |x+2|$$

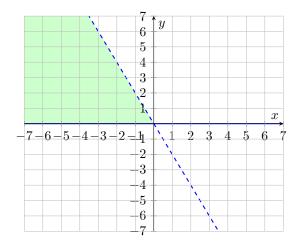
$$2|x+1| - 3x + |x+2| > 0$$



$$x \in (-\infty; \infty)$$



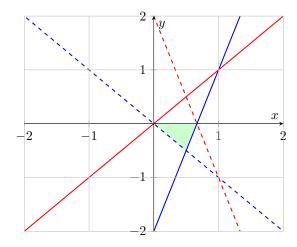
$$|x| - x > 0$$



$$x \in (-\infty; 0)$$

$$|2x - 1| < |1 - x|$$

$$|2x - 1| - |1 - x| < 0$$

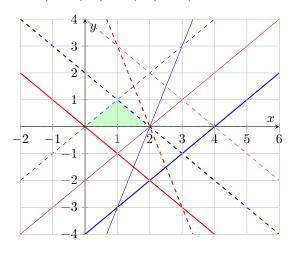


$$x\in(0;\frac{2}{3})$$

7.)

$$|x-3| - |2-x| \ge |x-1|$$

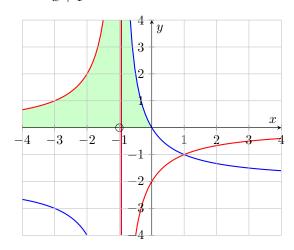
$$|x-3|-|2-x|-|x-1| \ge 0$$



 $x \in [0;2]$ 

$$|\frac{1-x}{x+1}| \ge 1$$

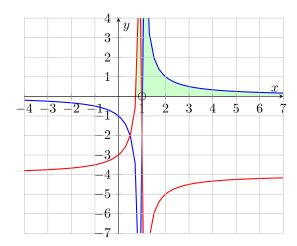
$$|\frac{1-x}{x+1}|-1\geq 0$$



$$x \in (-\infty; -1) \cup (-1; 0]$$

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

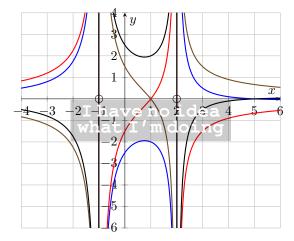
$$\left|\frac{2x-1}{x-1}\right|-2\geq 0$$



$$x \in [\frac{3}{4};1) \cup (1;\infty)$$

$$\frac{1}{|x-2|} < \frac{2}{|x+1|}$$

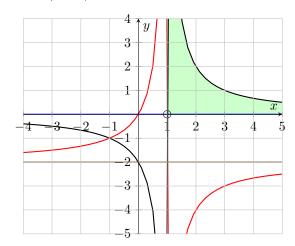
$$\frac{1}{|x-2|} - \frac{2}{|x+1|} < 0$$



$$x \in (-\infty; -1) \cup (-1; 1) \cup (5; \infty)$$

$$\underbrace{\frac{|x|-1}{|x-1|}} \geq 1$$

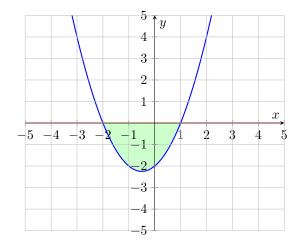
$$\frac{|x| - 1}{|x - 1|} - 1 \ge 0$$



$$x \in (1, \infty)$$

$$x^2 + x - 2 < 0$$

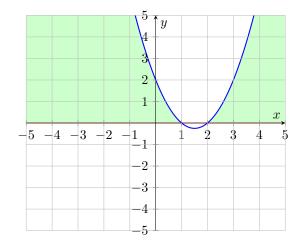
$$x \in \{-2;1\}$$



$$x \in (-2, 1)$$

$$x^2 - 3x + 2 \ge 0$$

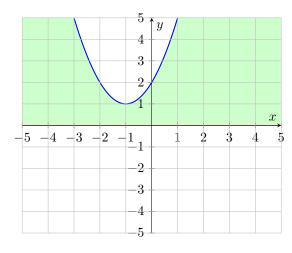
$$x \in \{1;2\}$$



$$x\in (-\infty,1]\cup [2;\infty)$$

$$x^2 + 2x + 2 > 0$$

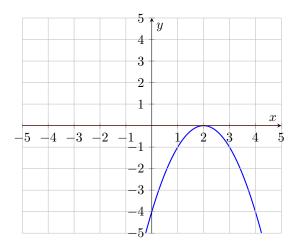
$$x\in\emptyset$$



$$x \in (-\infty, \infty)$$

$$-x^2 + 4x - 4 > 0$$

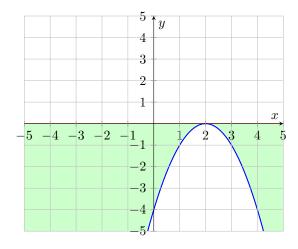
$$x_1 = x_2 = 2$$



 $x\in\emptyset$ 

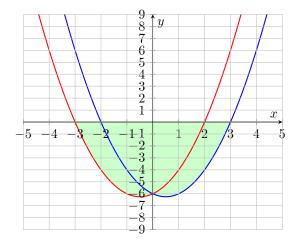
$$-x^2 + 4x - 4 \le 0$$

$$x_1 = x_2 = 2$$



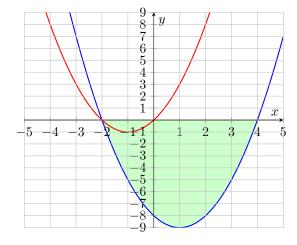
$$x \in (\infty, -\infty)$$

$$x^2 - |x| - 6 < 0$$



$$x\in (-3;3)$$

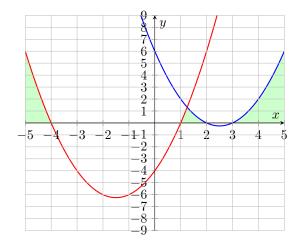
$$x^2 - 2|x + 2| - 4 \le 0$$



 $x \in [-2;4]$ 

$$x^2 - |4x - 5| > x - 1$$

$$x^2 - |4x - 5| - x + 1 > 0$$

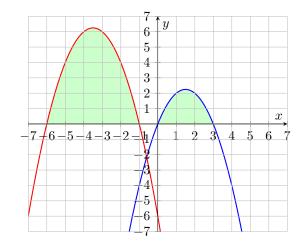


$$x \in (-\infty; -4) \cup (1; 2) \cup (3; \infty)$$

$$\bigcirc$$

$$|5x+3| > x^2 + 2x + 3$$

$$|5x+3| - x^2 - 2x - 3 > 0$$



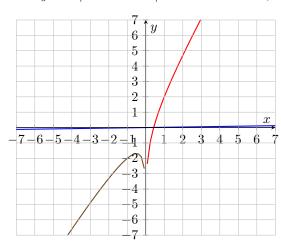
$$x \in (-6; -1) \cup (0; 3)$$

 $\bigcirc$ 21)

$$\begin{cases} x = \sin t \\ y = \ln|t| + 2t \end{cases}$$

 $t=\pm \arcsin x\cdot n\pi; n\in Z$ 

 $y = \ln|\arcsin x \cdot n\pi| \pm 2\arcsin x + 2n\pi; n \in Z$ 



$$x \in (-6; -1) \cup (0; 3)$$