

$$a) \quad 3x - 7 \leq 0$$

$$3x \leq 7$$

$$x \leq \frac{7}{3}$$

$$b) \quad -5x + 10 \leq$$

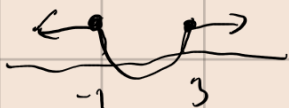
$$x \geq -\frac{10}{5}$$

$$x \geq 2$$

$$x^2 - 2x - 3 \geq 0$$

$$\wedge$$

$$1-3$$



	-1	3
$x-3$	-	+
$x+1$	-	+
	+	-

uricte def. obor fce:

$$a) \quad f(x) = \frac{1}{x+1} \quad D = \mathbb{R} \setminus \{-1\}$$

$$b) \quad f(x) = \log\left(\frac{(x+1)(x-2)}{x+3}\right) \quad \frac{(x+1)(x-2)}{x+3} > 0$$

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

	-3	-1	2
$x+1$	-	-	+
$x-2$	-	-	+
$x+3$	-	+	+

$$f_1(x) = \sqrt{\frac{(x+1)(x-2)}{x+3}} \quad D_{f_1} = (-3, -1) \cup (2, \infty)$$

$$f(x) = \sqrt{4 - |x-2|} \quad D = (-2, 6)$$

$$4 - |x-2| \geq 0$$

$$|x-2| \leq 4$$

$$x \geq 2 \quad x < 2$$

$$x-2 \leq 4$$

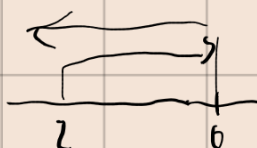
$$x \leq 6$$

$$\sqrt{\quad}$$

$$-x+2 \leq 4$$

$$-x \leq 2$$

$$x \geq 2$$



$$|x-4| \leq 3 \quad (1; 7)$$

$$|x+3| > 2 \quad (-\infty, -5) \cup (-1; \infty)$$

$$|5-x| < 4 \quad (1; 9)$$

$$|3x+5| \geq 6 \quad 3\left|x+\frac{5}{3}\right| \geq 6 \rightarrow \left|x+\frac{5}{3}\right| \geq 2 \quad (-\infty, -\frac{5}{3}-2) \cup (-\frac{5}{3}+2; \infty)$$

$$|x| \leq |x-1|$$

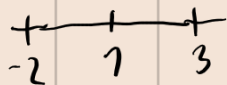


$$x^2 - 2x - 3 \geq 0$$

$$(x-1)^2 - 4 \geq 0$$

$$(x-1)^2 \geq 4 \quad |\sqrt{x}|$$

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



$$ax^2 + bx + c = 0, \quad a \neq 0$$

$$x^2 + \frac{b}{a}x + \frac{c}{a} = 0$$

$$\left(x + \frac{b}{2a}\right)^2 - \frac{b^2}{4a^2} + \frac{c}{a} = 0$$

$$\left(x + \frac{b}{2a}\right)^2 = \frac{b^2}{4a^2} - \frac{c}{a}$$

$$\left|x + \frac{b}{2a}\right| = \sqrt{\frac{b^2}{4a^2} - \frac{c}{a}}$$

$$x + \frac{b}{2a} = \pm \sqrt{\frac{b^2 - 4ac}{(2a)^2}}$$

$$x = -\frac{b}{2a} \pm \frac{b^2 - 4ac}{2|a|}$$