

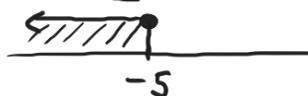
RIEŠENIE NIEKTORÝCH TYPŮV NEROVNÍC

PRÍKLAD: RIEŠME NEROVNICE

a) $2x + 10 \leq 0$

$2 \cdot x \leq -10$

$x \leq -5$

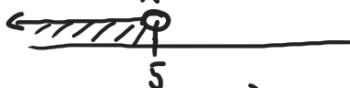


$x \in (-\infty, -5]$

b) $15 - 3x > 0$

$-3x > -15$

$x < 5$



$x \in (-\infty, 5)$

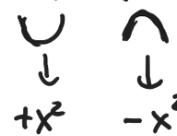
c) $x^2 - 3x - 4 \geq 0$
 (x - 4)(x + 1) ≥ 0



$x \in (-\infty, -1] \cup [4, \infty)$

$\uparrow = x^2 - 3x - 4$

PARABOLA



d) $x^2 + 6x + 5 < 0$

$(x + 1)(x + 5) < 0$

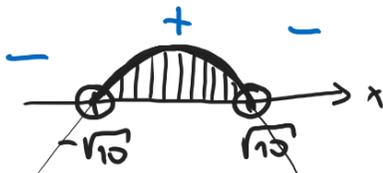


$x \in (-5, -1)$

$A^2 - B^2 = (A - B)(A + B)$

e) $10 - x^2 > 0$

$(\sqrt{10} - x)(\sqrt{10} + x) > 0$



$x \in (-\sqrt{10}, \sqrt{10})$

f) $x^3 + x^2 - 12x \leq 0$

$x(x^2 + x - 12) \leq 0$

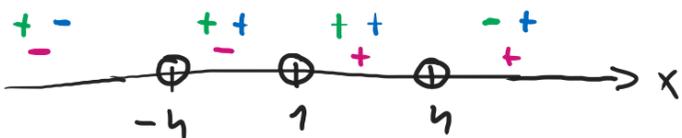
$x(x + 4)(x - 3) \leq 0$



$x \in (-\infty, -4] \cup [0, 3]$

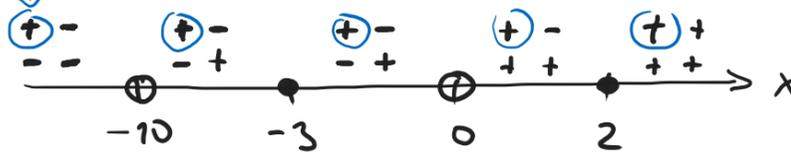
g) $\frac{16 - x^2}{x - 1} < 0$

$\frac{(4 - x)(4 + x)}{x - 1} < 0$



$x \in (-4, 1) \cup (4, \infty)$

h) $\frac{(x + 3)^2(x - 2)^3}{x(x + 10)} \geq 0$



$x \in (-10, 0) \cup [2, \infty)$