DOBRÉ RÁNO :)

100B
- 1.ZP V 8.TÝŽDNI (45B) NA CVIČENÍ
- 2.ZP SKÚŠKOVÉ OBDOBIE (55B) 8.1 a 9.1.2025

PRVÁ OPRAVA PREVIEROK : 14.1 - OPRAVA 1.ZP
21.1 - OPRAVA 2.ZP

DRUHÁ OPRAVA PREVIEROK :
- LEN PRE ŠTUDENTOV, KTORÍ ZÍSKALI ASPOŇ 40B

MAIS a MOODLE - ZATIAĽ SA NEHLÁSIŤ!
AŽ PO INFORMAČNOM MAILE

KM - VŠETKY INFOMÁCIE NA STRÁNKE Dr. HUTNÍKOVEJ

MNOŽINY

SPÔSOB ZADANIA RESP. URČENIA MNOŽINY

1) VYMENOVANIE PRVKOV $M = \{0, 1, 2, 3, 4, 5\}$

2) CHARAKTERISTICKOU VLASTNOSŤOU $M = \{x \in \mathbb{R} ; x < 2\}$

Pr1) $A = \{0, 1\}$ $\quad A \subset B$

$B = \{x \in R ; x^2 < 2\}$ $\quad B \not\subset A \quad -1 \in B$

$-1 \notin A$

Pr2) $A = \{1, 2, 3\}$ $\quad A \cup B = \{1, 2, 3, 5, 6, 7\}$

$B = \{3, 5, 6, 7\}$ $\quad A \cap B = \{3\}$

$A \setminus B = \{1, 2\}$

$B \setminus A = \{5, 6, 7\}$

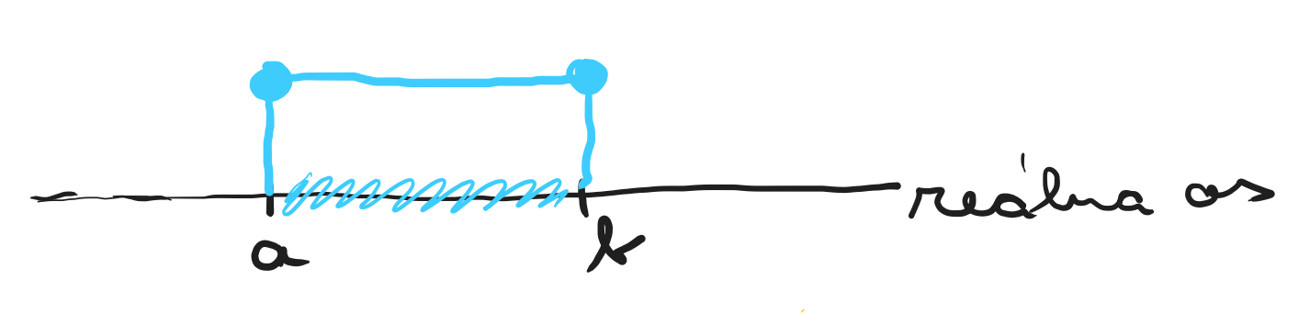
$A \times B = \{[1,3]; [1,5]; [1,6]; [1,7]; [2,3]; [2,5] \dots\}$

$M = \{1, 2, 3, 5, 6, 7\}$; $A, B \subset M$

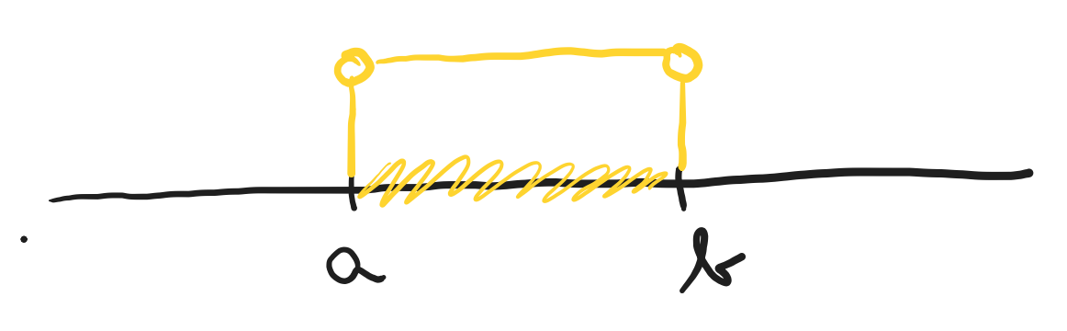
$A^c = \{5, 6, 7\}$

ČÍSELNÉ INTERVALY

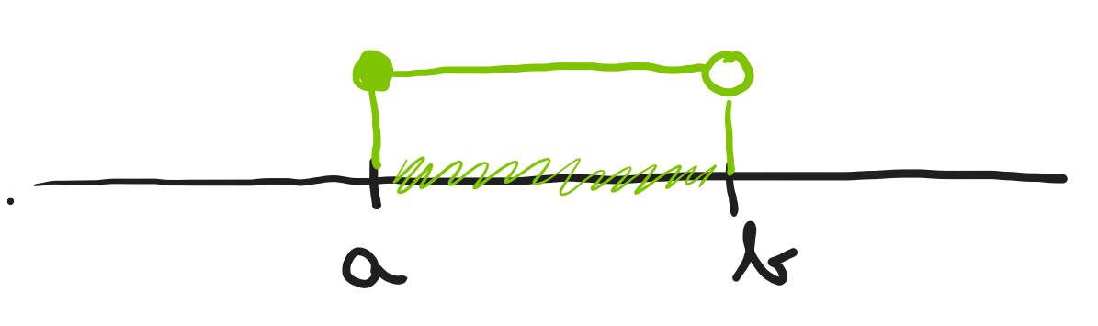
$\langle a, b \rangle$



(a, b)

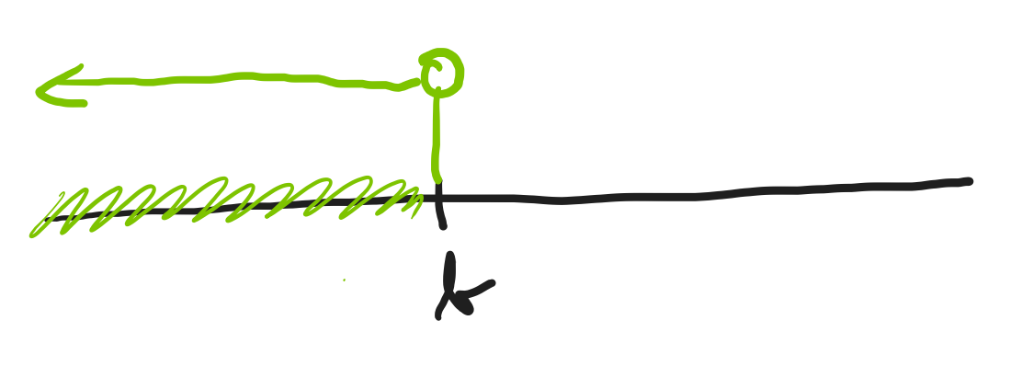


$\langle a, b)$



NEPOUŽÍVAŤ $\cancel{[\;]}$, ALE $\langle \;\; \rangle$

$R^* = \mathbb{R} \cup \{\pm\infty\}$ $\qquad \mathbb{R} = (-\infty ; \infty)$

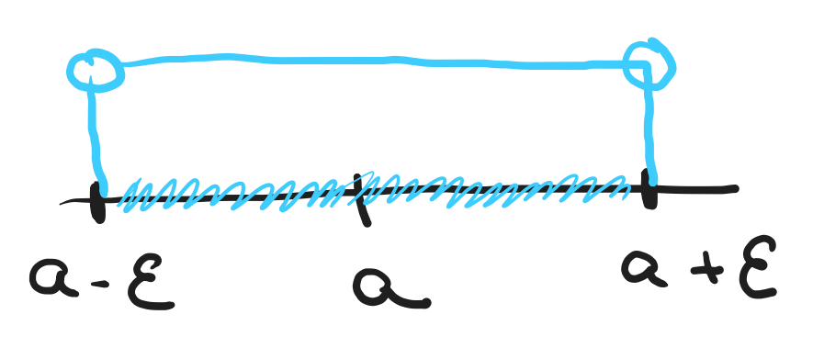


$(-\infty ; b)$

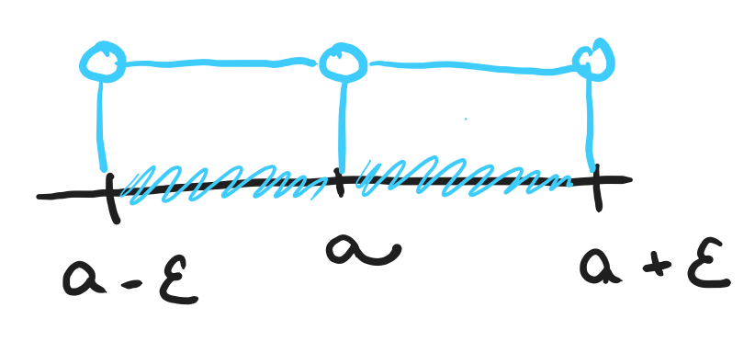
$\langle a ; \infty)$

OKOLIE BODU

$O_\varepsilon(a) = (a - \varepsilon ; a + \varepsilon)$



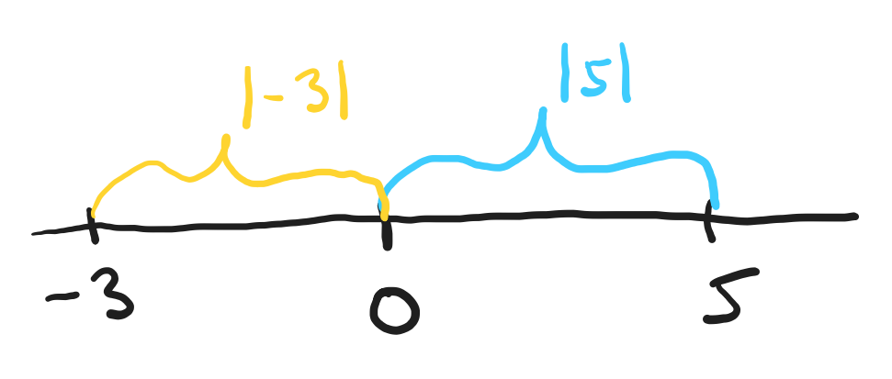
$O_\varepsilon^\circ(a) = (a - \varepsilon ; a) \cup (a, a + \varepsilon)$



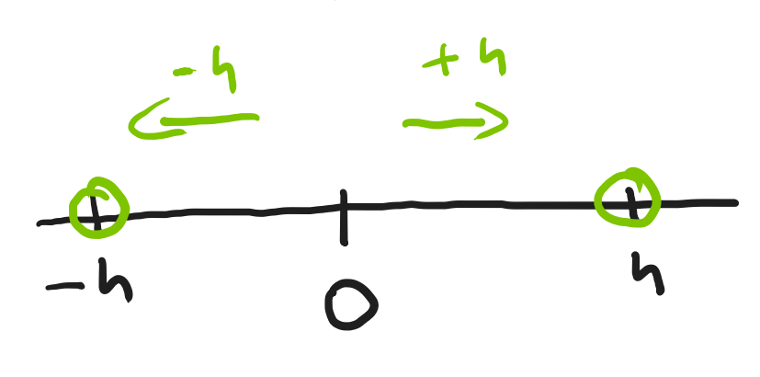
ABSOLÚTNA HODNOTA REÁLNEHO ČÍSLA

Pr1) $|5| = 5$

$|-3| = 3$

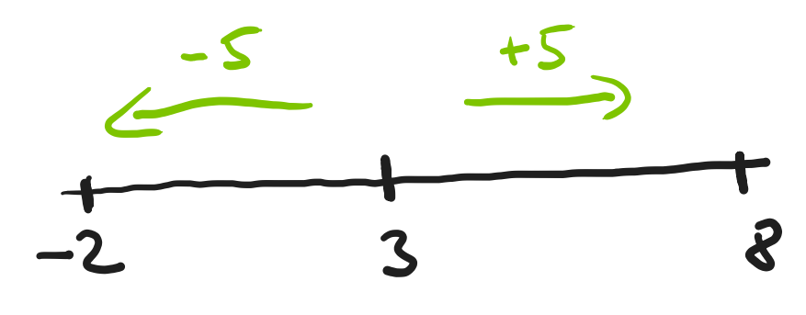


Pr2) $|x| = 4$



$x = \pm 4$

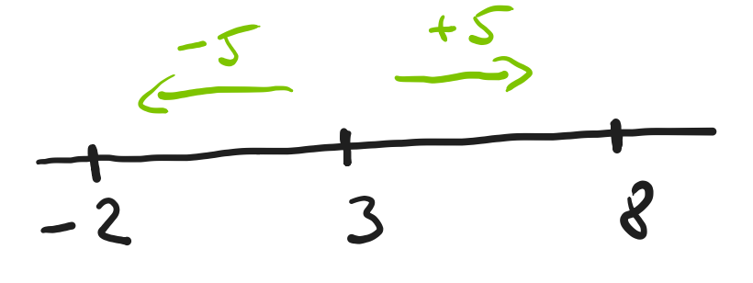
Pr3) $|x - 3| = 5$



$x_1 = -2$

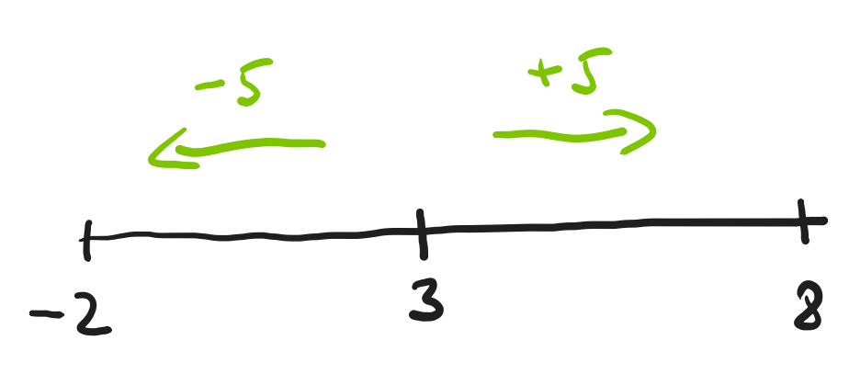
$x_2 = 8$

Pr4) $|x - 3| < 5$



$x \in (-2 ; 8)$

Pr5) $|x - 3| \geq 5$



$x \in (-\infty ; -2\rangle \cup \langle 8 ; \infty)$

VYUŽITÍM ABSOLÚTNEJ HODNOTY

$O_\varepsilon(a) = (a - \varepsilon, a + \varepsilon) = \{x \in \mathbb{R} ; |x - a| < \varepsilon\}$

$O_\varepsilon^\circ(a) = (a - \varepsilon, a + \varepsilon) - \{a\} = \{x \in \mathbb{R} ; 0 < |x - a| < \varepsilon\}$

Pr1) $A = \{-1, 0, 1\}$

max $A = 1$

min $A = -1$

Pr2) $B = (1 ; 3\rangle$

max $B = 3$

min B = nemá

Pr3) $C = (1 ; 5\rangle$

dolné ohraničenie : $k = -20$
$k = 1$
$k = 0$

horné ohraničenie : $K = 5$ = max C
$K = 10$
$K = 2024$

sup $C = 5$ = max C

inf $C = 1$ $\qquad$ min C = nemá

Pr4) $D = (1 ; \infty)$

min D = nemá $\qquad$ max D = nemá

inf $D = 1$ $\qquad$ sup D = nemá

ČÍSELNÉ MNOŽINY