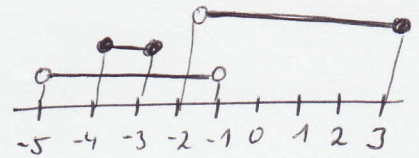


Př: Pro zadání intervaly $A = (-5, -1)$, $B = \langle -4, -3 \rangle$, $C = (-2, 3)$ (2)

vypočítejte:

$$\begin{array}{l} (A \cap B) \cup C \\ A \cap (B \cup C) \\ (B \cap C) \cup A \\ B \cap (C \cup A) \\ (C \cap A) \cup B \\ C \cap (A \cup B) \end{array} \quad \left[\begin{array}{l} \text{Řešení} \\ = \langle -4, -3 \rangle \cup (-2, 3) \\ = \langle -4, -3 \rangle \cup (-2, -1) \\ = (-5, -1) = A \\ = \langle -4, -3 \rangle = B \\ = \langle -4, -3 \rangle \cup (-2, -1) \\ = (-2, -1) \end{array} \right]$$



$$|x| = \begin{cases} x & \text{pro } x \geq 0 \\ -x & \text{pro } x < 0 \end{cases}$$

Př: Bez použití absolutní hodnoty zapíšte

a) $|x-2|$

b) $2 + |3-x|$

c) $|x+1| - |x-2|$

$$|x-2| = \begin{cases} x-2 & \text{pro } x \geq 2 \\ 2-x & \text{pro } x < 2 \end{cases}$$

$$2 + |3-x| = \begin{cases} 5-x & \text{pro } x \geq 3 \\ x-1 & \text{pro } x < 3 \end{cases}$$

$$|x+1| - |x-2| = \begin{cases} -3 & \text{pro } x \leq -1 \\ 2x-1 & \text{pro } x \in (-1, 2) \\ 3 & \text{pro } x \geq 2 \end{cases}$$