

4) Řešte v  $\mathbb{R}$  nerovnici:  $|x-3| - 2 \cdot |x+2| + x + 7 < x + 3$

$$|x-3| - 2 \cdot |x+2| + x + 7 < x + 3$$

nulové hodnoty:  $x_{01} = 3, \quad x_{02} = -2$

$$1) x \in (-\infty, -2) \Rightarrow -x + 3 + 2x + 4 + x + 7 < x + 3$$

$$2x + 14 < x + 3$$

$$x < -11$$

$$P_1 = (-\infty, -11)$$

$$2) x \in \langle -2, 3 \rangle \Rightarrow -x + 3 - 2x - 4 + x + 7 < x + 3$$

$$-2x + 6 < x + 3$$

$$3 < 3x$$

$$1 < x$$

$$P_2 = \langle 1, 3 \rangle$$

$$3) x \in (3, \infty) \Rightarrow x - 3 - 2x - 4 + x + 7 < x + 3$$

$$0 < x + 3$$

$$-3 < x$$

$$P_3 = (3, \infty)$$

$$P = (-\infty, -11) \cup (1, \infty)$$

[Zpět:](#)