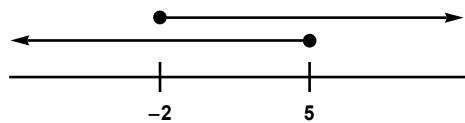


## Operace s intervaly

### Příklady

Určete sjednocení a průnik intervalů.

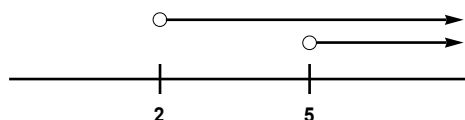
1)  $(-\infty; 5), \langle -2; \infty)$



$$(-\infty; 5) \cup \langle -2; \infty) = (-\infty; \infty)$$

$$(-\infty; 5) \cap \langle -2; \infty) = \langle -2; 5)$$

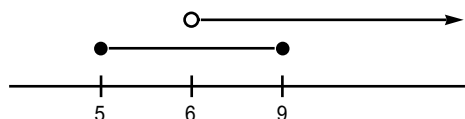
2)  $(5; \infty), (2; \infty)$



$$(5; \infty) \cup (2; \infty) = (2; \infty)$$

$$(5; \infty) \cap (2; \infty) = (5; \infty)$$

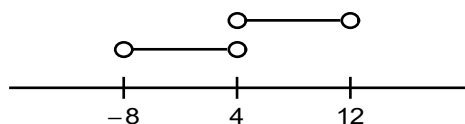
3)  $\langle 5; 9), (6; \infty)$



$$\langle 5; 9) \cup (6; \infty) = \langle 5; \infty)$$

$$\langle 5; 9) \cap (6; \infty) = (6; 9)$$

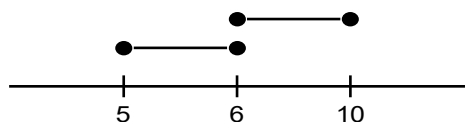
4)  $(-8; 4), (4; 12)$



$(-8; 4) \cup (4; 12)$  – toto sjednocení nelze vyjádřit jedním intervalem

$$(-8; 4) \cap (4; 12) = \emptyset$$

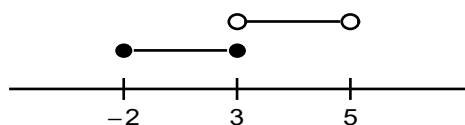
5)  $\langle 5; 6), \langle 6; 10)$



$$\langle 5; 6) \cup \langle 6; 10) = \langle 5; 10)$$

$$\langle 5; 6) \cap \langle 6; 10) = \{6\}$$

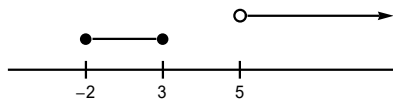
6)  $\langle -2; 3), (3; 5)$



$$\langle -2; 3) \cup (3; 5) = \langle -2; 5)$$

$$\langle -2; 3) \cap (3; 5) = \emptyset$$

7)  $\langle -2; 3 \rangle, (5; \infty)$



$\langle -2; 3 \rangle \cup (5; \infty)$  – toto sjednocení nelze vyjádřit jedním intervalem

$\langle -2; 3 \rangle \cap (5; \infty) = \emptyset$