

Příklady k procvičení:

**a)**  $A = \{1,3,5,7,9\}$

$$B = \{2,3,4,5,6,8\}$$

**b)**  $A = \{-1,0,2,3,5,7\}$

$$B = \{0,1,2,3,4,5,6\}$$

**c)**  $A = \{2,4,5,6,8\}$

$$B = \{-3,0,2,3,4,5,6,7\}$$

**d)**  $A = \{-10,-7,-4,-3,-2,-1\}$

$$B = \{-9,-8,-7,-6,-4,-2\}$$

**e)**  $A = \{-7,-6,-5,-3,-2,1,3,5,6,9\}$

$$B = \{-9,-8,-6,-4,-1,0,2,3,6,8\}$$

**f)**  $A = \{-10,-7,-4,-3,-2,-1\}$

$$B = \{-9,-8,-7,-6,-4,-2\}$$

**g)**  $A = \{-6,-4,-2,0,1,3,5,7\}$

$$B = \mathbb{N}$$

**h)**  $A = \mathbb{Z}$

$$B = \mathbb{Q}$$

**i)**  $A = \mathbb{Z}$

$$B = \langle -2;5 \rangle$$

**j)**  $A = \{a,d,e,f,i,j,k,m,q,r,w\}$

$$B = \{c,d,f,j,k,p,q,r,s,t,y\}$$

Příklady g), h), i) vynechejte, ty jsme si neukazovali.

## Výsledky:

- a)**  $A \cap B = \{3,5\}$   
 $A \cup B = \{1,2,3,4,5,6,7,8,9\}$   
 $A - B = \{1,7,9\}$   
 $B - A = \{2,4,6,8\}$
- b)**  $A \cap B = \{0,2,3,5\}$   
 $A \cup B = \{-1,0,1,2,3,4,5,6,7\}$   
 $A - B = \{-1,7\}$   
 $B - A = \{1,4,6\}$
- c)**  $A \cap B = \{2,4,5,6\}$   
 $A \cup B = \{-3,0,2,3,4,5,6,7,8\}$   
 $A - B = \{8\}$   
 $B - A = \{-3,0,3,7\}$
- d)**  $A \cap B = \{-7,-4,-2\}$   
 $A \cup B = \{-10,-9,-8,-7,-6,-4,-3,-2,-1\}$   
 $A - B = \{-10,-3,-1\}$   
 $B - A = \{-9,-8,-6\}$
- e)**  $A \cap B = \{-6,3,6\}$   
 $A \cup B = \left\{ \begin{array}{l} -9,-8,-7,-6,-5,-4,-3, \\ -2,-1,0,1,2,3,5,6,8,9 \end{array} \right\}$   
 $A - B = \{-7,-5,-3,-2,1,5,9\}$   
 $B - A = \{-9,-8,-4,-1,0,2,8\}$
- f)**  $A \cap B = \{-7,-4,-2\}$   
 $A \cup B = \{-10,-9,-8,-7,-6,-4,-3,-2,-1\}$   
 $A - B = \{-10,-3,-1\}$   
 $B - A = \{-9,-8,-6\}$
- g)**  $A \cap B = \{1,3,5,7\}$   
 $A \cup B = \{-6,-4,-2,0\} \cup \mathbf{N}$   
 $A - B = \{-6,-4,-2,0\}$   
 $B - A = \mathbf{N} \setminus \{1,3,5,7\}$
- h)**  $A \cap B = \mathbf{Z}$   
 $A \cup B = \mathbf{Q}$   
 $A - B = \mathbf{\emptyset}$   
 $B - A = \mathbf{Q} \setminus \mathbf{Z}$
- i)**  $A \cap B = \{-2,-1,0,1,2,3,4,5\}$   
 $A \cup B = \mathbf{Z} \cup \langle -2;5 \rangle$   
 $A - B = \mathbf{Z} \setminus \{-2,-1,0,1,2,3,4,5\}$   
 $B - A = \langle -2;5 \rangle \setminus \{-2,-1,0,1,2,3,4,5\}$
- j)**  $A \cap B = \{d,f,j,k,q,r\}$   
 $A \cup B = \{a,c,d,e,f,i,j,k,m,p,q,r,s,t,w,y\}$   
 $A - B = \{a,e,i,m,w\}$   
 $B - A = \{c,p,s,t,y\}$