INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

AUTOR:	Mgr. Pavel Viskup	ZNAČKA:	VY_42_INOVACE_03_M_03
OBOR STUDIA:	Gastronomie	ROČNÍK:	2.,3.
PŘEDMĚT:	Seminář a cvičení z matematiky	VYTVOŘENO:	Duben 2013
TEMATICKÝ OKRUH:	Příprava k státní maturitě		
NÁZEV:	Množiny, operace s množinami		
ANOTACE, METODICKÝ POKYN:	PRACOVNÍ LIST Sjednocení, průnik, rozdíl množin Intervaly jako číselné množiny Materiál zaměřen na procvičení operací s množinami, zapamatování symbolů při zápisu množin, znázorňování intervalů na číselné ose.		
ODKAZY A CITACE:	Vlastní práce autora (tabulky, grafy, obrázky).		

PRACOVNÍ LIST – MNOŽINY, OPERACE S MNOŽINAMI

1. Jsou dány množiny A, B. Zapište $A \cup B; A \cap B; rozdíl\ množin\ A \backslash B; B \backslash A$

Př.: $A = \{-1,0,1,2,3\}$ $B = \{-2,-1,0\}$

$A \cup B = \{-2,-1,0,1,2,3\}$ $A \cap B = \{-1,0\}$ $A \setminus B = \{1,2,3\}$ $B \setminus A = \{-2\}$

$A = \{a; b; c; d; e\}$ $B = \{a; e; i\}$

$A \cup B =$ $A \cap B =$ $A \backslash B =$ $B \backslash A =$

$A = \{-3; -2; -1; 0; 1\}$ $B = \{x \in N; x \leq 2\}$

$A \cup B =$ $A \cap B =$ $A \backslash B =$ $B \backslash A =$

$A = \{1; 2; 3; 4\}$ $B = \{x \in N; x < 2\}$

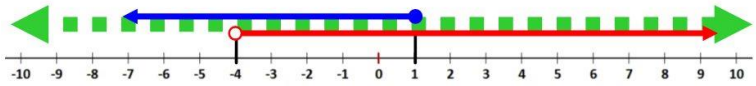
$A \cup B =$ $A \cap B =$ $A \backslash B =$ $B \backslash A =$

$A = \{x \in N; x < 3\}$ $B = \{x \in Z; -1 \leq x < 2\}$

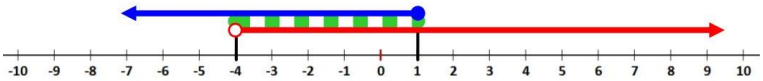
$A \cup B =$ $A \cap B =$ $A \backslash B =$ $B \backslash A =$

2. Podle znázorněných intervalů zapište sjednocení a průnik jako interval.

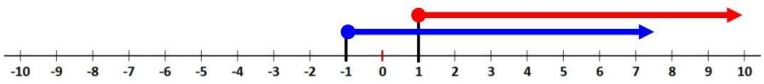
Př.:



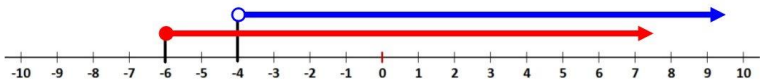
$\cup = (-\infty; \infty) = \boldsymbol{R}$



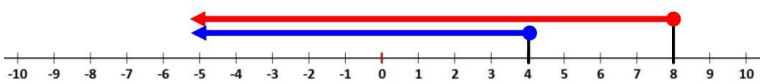
$\cap = (-4; 1\rangle$



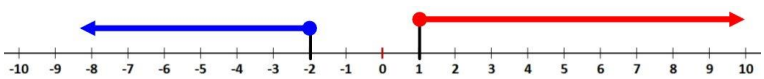
$\cup =$ $\cap =$



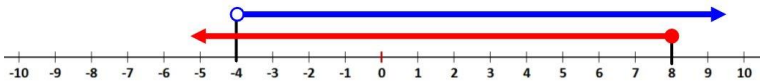
$\cup =$ $\cap =$



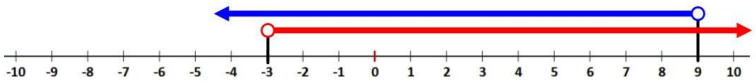
$\cup =$ $\cap =$



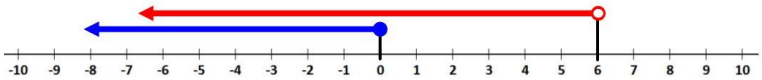
$\cup =$ $\cap =$



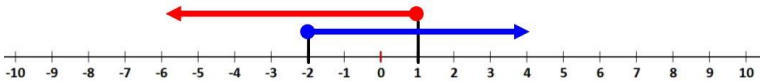
$\cup =$ $\cap =$



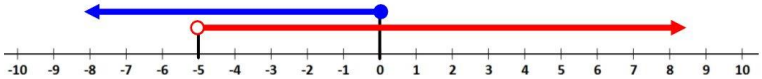
∪= ∩=



∪= ∩=



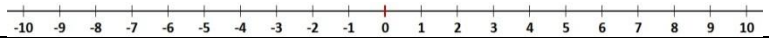
∪= ∩=



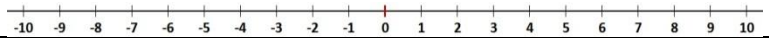
∪= ∩=

3. Zapište jedním intervalem, zakreslete intervaly na číselnou osu.

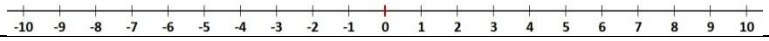
a) $(-7;-1)\cup\langle -3;3\rangle$



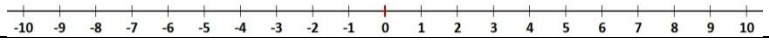
b) $(-2;5)\cap\langle 0;8\rangle$



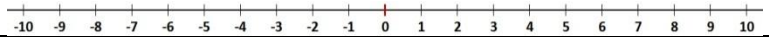
c) $(-4;2)\cap\langle 1;7\rangle$



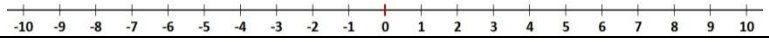
d) $(-3;4)\cup\langle 0;8\rangle$



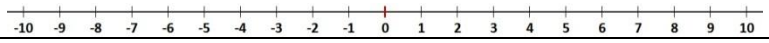
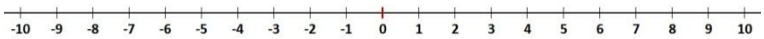
e) $(-\infty;3\rangle\cap\langle -2;5)$



f) $(-7;-3)\cup(-5;+\infty)$



g) $\langle -6;2)\cap(2;4\rangle$



h) $(-\infty;0)\cup\langle 0;+\infty)$