



- 1. A**
- $M_1 \cap M_2 = \{1; 8; 10\}$
 - $M_1 \cup M_2 = \{1; 2; 3; 4; 5; 8; 10; 11; 15; 20\}$
 - $M_1 \setminus M_2 = \{2; 3; 4\}$
 - $M_2 \setminus M_1 = \{5; 11; 15; 20\}$
 - $(M_1 \cap M_2) \setminus M_1 = \{1; 8; 10\} \setminus \{1; 2; 3; 4; 8; 10\} = \{\}$
 - $(M_1 \cup M_2) \setminus (M_1 \cap M_2) = \{1; 2; 3; 4; 5; 8; 10; 11; 15; 20\} \setminus \{1; 8; 10\} = \{2; 3; 4; 5; 11; 15; 20\}$
 - $(M_2 \cap M_1) \cup M_1 = \{1; 8; 10\} \cup \{1; 2; 3; 4; 8; 10\} = \{1; 2; 3; 4; 8; 10\}$
- B**
- $M_1 \cap M_2 = \{4; 10\}$
 - $M_1 \cup M_2 = \{1; 2; 4; 5; 10\}$
 - $M_1 \setminus M_2 = \{1; 2; 5\}$
 - $M_2 \setminus M_1 = \{\}$
 - $(M_1 \cap M_2) \setminus M_1 = \{4; 10\} \setminus \{1; 2; 4; 5; 10\} = \{\}$
 - $(M_1 \cup M_2) \setminus (M_1 \cap M_2) = \{1; 2; 4; 5; 10\} \setminus \{4; 10\} = \{1; 2; 5\}$
 - $(M_2 \cap M_1) \cup M_1 = \{4; 10\} \cup \{1; 2; 4; 5; 10\} = \{1; 2; 4; 5; 10\}$
- C**
- $M_1 \cap M_2 = \{\}$
 - $M_1 \cup M_2 = \{1; 2; 3; 4; 5; 6; 9\}$
 - $M_1 \setminus M_2 = \{2; 4; 9\}$
 - $M_2 \setminus M_1 = \{1; 3; 5; 6\}$
 - $(M_1 \cap M_2) \setminus M_1 = \{\} \setminus \{2; 4; 9\} = \{\}$
 - $(M_1 \cup M_2) \setminus (M_1 \cap M_2) = \{1; 2; 3; 4; 5; 6; 9\} \setminus \{\} = \{1; 2; 3; 4; 5; 6; 9\}$
 - $(M_1 \cap M_2) \cup M_1 = \{\} \cup \{2; 4; 9\} = \{2; 4; 9\}$
- D**
- $M_1 \cap M_2 = \{m\}$
 - $M_1 \cup M_2 = \{a; d; e; g; m; x\}$
 - $M_1 \setminus M_2 = \{a; e; x\}$
 - $M_2 \setminus M_1 = \{d; g\}$
 - $(M_1 \cap M_2) \setminus M_1 = \{m\} \setminus \{a; e; m; x\} = \{\}$
 - $(M_1 \cup M_2) \setminus (M_1 \cap M_2) = \{a; d; e; g; m; x\} \setminus \{m\} = \{a; d; e; g; x\}$
 - $(M_2 \cap M_1) \cup M_1 = \{m\} \cup \{a; e; m; x\} = \{a; e; m; x\}$
- 2.**
- $M_1 \cap M_2 = \{2; 10; 20\}$
 - $M_1 \cap M_3 = \{2; 8; 10\}$
 - $M_2 \setminus M_3 = \{4; 7; 20\}$
 - $M_3 \setminus M_1 = \{3; 6\}$
 - $M_1 \cup M_3 = \{1; 2; 3; 5; 6; 8; 10; 20\}$
 - $M_2 \cup M_1 = \{1; 2; 3; 4; 5; 7; 8; 10; 20\}$
 - $(M_1 \cap M_3) \setminus M_2 = \{2; 8; 10\} \setminus \{2; 3; 4; 7; 10; 20\} = \{8\}$
 - $(M_2 \cap M_1) \setminus M_3 = \{2; 10; 20\} \setminus \{2; 3; 6; 8; 10\} = \{20\}$
 - $(M_1 \cap M_3) \cup M_2 = \{2; 8; 10\} \cup \{2; 3; 4; 7; 10; 20\} = \{2; 3; 4; 7; 8; 10; 20\}$
 - $(M_1 \setminus M_3) \cap M_2 = \{1; 5; 20\} \cap \{2; 3; 4; 7; 10; 20\} = \{20\}$
 - $M_1 \cap (M_3 \setminus M_2) = \{1; 2; 5; 8; 10; 20\} \cap \{6; 8\} = \{8\}$
 - $(M_1 \cup M_3) \setminus (M_2 \cap M_1) = \{1; 2; 3; 5; 6; 8; 10; 20\} \setminus \{2; 10; 20\} = \{1; 3; 5; 6; 8\}$
 - $M_3 \setminus (M_2 \cup M_1) = \{2; 3; 6; 8; 10\} \setminus \{1; 2; 3; 4; 5; 7; 8; 10; 20\} = \{6\}$
 - $(M_1 \cap M_2) \setminus (M_2 \cap M_3) = \{2; 10; 20\} \setminus \{2; 3; 10\} = \{20\}$
- 3.**
- $(M_1 \cap M_3) \setminus M_2 = \{3\} \setminus \{1; 2; 4; 8; 10\} = \{3\}$
 - $(M_1 \setminus M_3) \cup (M_2 \setminus M_1) = \{2; 6\} \cup \{1; 4; 8; 10\} = \{1; 2; 4; 6; 8; 10\}$
 - $M_1 \cap M_2 \cap M_3 = \{\}$
 - $(M_1 \cup M_3) \setminus (M_1 \cap M_2) = \{2; 3; 4; 5; 6; 12\} \setminus \{2\} = \{3; 4; 5; 6; 12\}$