



1.)

$$\mathcal{P}(B) - \mathcal{P}(C)$$

$$B = \{0, 1, 2\}$$

$$C = \{1, 2, 3\}$$

$$\mathcal{P}(B) = \{\emptyset; B; \{0\}; \{1\}; \{2\}; \{0, 1\}; \{0, 2\}; \{1, 2\}\}$$

$$\mathcal{P}(C) = \{\emptyset; C; \{1\}; \{2\}; \{3\}; \{1, 2\}; \{1, 3\}; \{2, 3\}\}$$

$$\begin{aligned}
 P(B) - P(C) &= \\
 &= \{ \cancel{A}, \{0\}, \{1\}, \{2\}, \{0,1\}, \{0,2\}, \{1,2\} \} \\
 &\quad \{ \cancel{A}, \{1\}, \{2\}, \{3\}, \{1,2\}, \{1,3\}, \{2,3\} \} = \\
 &= \{ \{0\}, \{1\}, \{2\} \}
 \end{aligned}$$

$$B = \{0, 1, 2\}$$

Es. 2

$$\mathcal{P}(B - C)$$

$$B = \{0, 1, 2\}$$

$$C = \{1, 2, 3\}$$

$$\boxed{B \setminus C = \{0\}}$$

$$\mathcal{P}(B \setminus C) = \mathcal{P}(\{0\}) = \underline{\{\emptyset; \{0\}\}}$$

ES. 3

$\mathcal{P}(B \cap C)$

$$B \cap C = \{0, 1, 2\} \cap \{1, 2, 3\} = \{1, 2\} \Rightarrow B \cap C = \{1, 2\}$$

$$\mathcal{P}(\{1, 2\}) = \{\emptyset, \{1, 2\}, \{1\}, \{2\}\}$$

$$B = \{0, 1, 2\}$$

$$C = \{1, 2, 3\}$$

$$\text{Ex. 4} \quad A = \{4, 5, 6\}; B = \{0, 1, 2\}; C = \{1, 2, 3\}$$

$$D = \{2, 3, 7, 8\}$$

$$(A \cup C) \setminus D = \{1, 2, 3, 4, 5, 6\} \setminus \{2, 3, 7, 8\} = \underline{\{1, 4, 5, 6\}}$$

$$\begin{aligned} \text{ES. 5} \quad & \underline{A = \{4, 5, 6\}} \quad \underline{B = \{0, 1, 2\}} \quad D = \{2, 3, 7, 8\} \\ & (A \cup B) \cap D = \{0, 1, 2, 4, 5, 6\} \cap \{2, 3, 7, 8\} = \\ & \quad \underline{\underline{= \{2\}}} \end{aligned}$$

$$\text{ES.6} \quad A = \{4, 5, 6\} \quad B = \{0, 1, 2\}$$

$$C = \{1, 2, 3\} \quad D = \{2, 3, 7, 8\}$$

$$P(\overline{C \cup \bar{C}}) = ? \quad \boxed{C \cup \bar{C} = U} \quad \textcircled{1} U = A \cup B \cup C \cup D = \{0, 1, 2, 3, 4, 5, 6, 7, 8\}$$

$$\boxed{\bar{C} = \{0, 4, 5, 6, 7, 8\}}$$

$$P(\bar{U}) = \boxed{P(\emptyset) = \{\emptyset\}} \quad \boxed{\text{part. ins. vuoto}}$$

$$\emptyset \quad \boxed{\text{ins. vuoto}}$$

$$P(\emptyset) = \{\emptyset\}$$