

# 問題

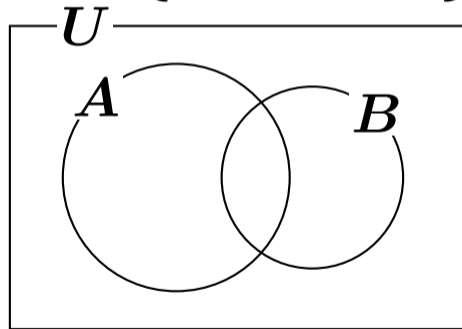
$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$  を全体集合とする。

$A = \{2, 3, 4, 7, 8\}$ ,  $B = \{4, 5, 7, 9\}$  のとき、次の集合を求めなさい。

# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

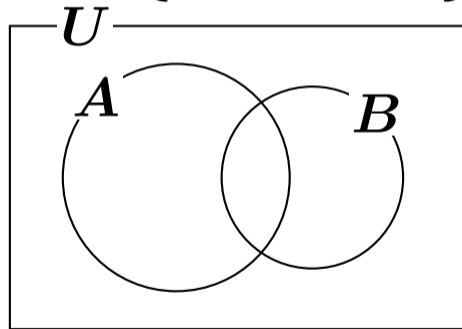
$$A = \{2, 3, 4, 7, 8\}, \quad B = \{4, 5, 7, 9\}$$



# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

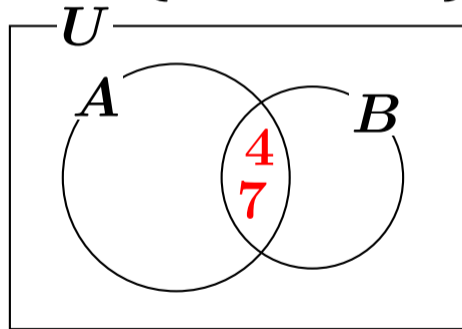
$$A = \{2, 3, 4, 7, 8\}, B = \{4, 5, 7, 9\}$$



# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

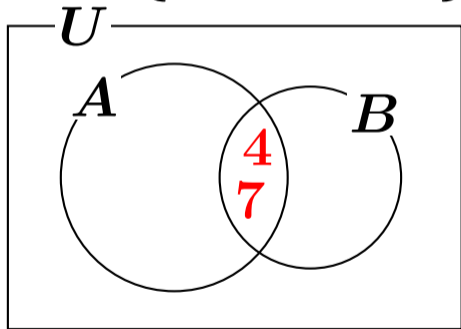
$$A = \{2, 3, 4, 7, 8\}, B = \{4, 5, 7, 9\}$$



# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

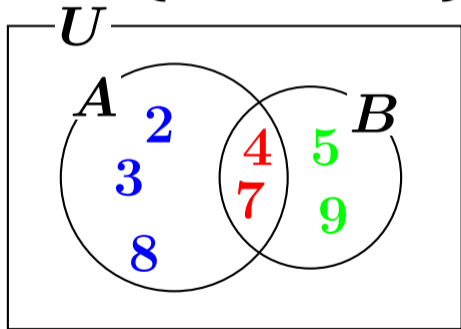
$$A = \{2, 3, 4, 7, 8\}, B = \{4, 5, 7, 9\}$$



# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

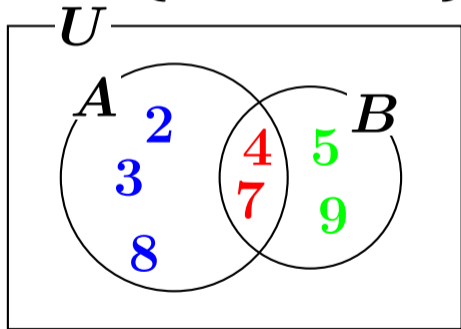
$$A = \{2, 3, 4, 7, 8\}, B = \{4, 5, 7, 9\}$$



# 図をかくと

$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

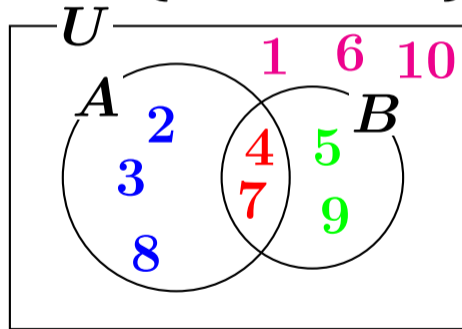
$$A = \{2, 3, 4, 7, 8\}, B = \{4, 5, 7, 9\}$$



# 図をかくと

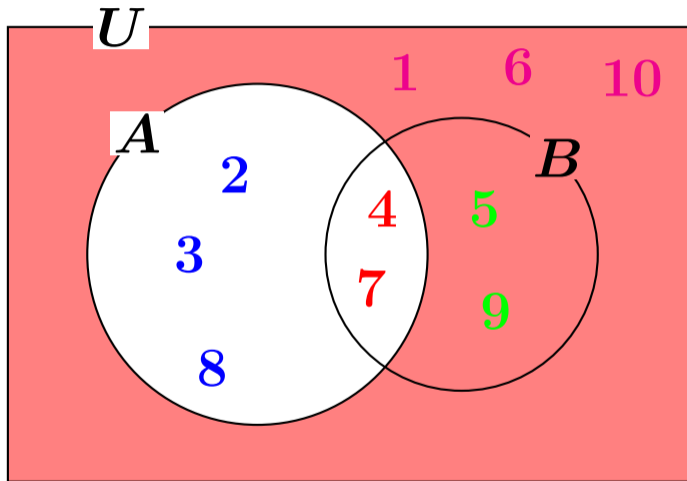
$$U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$$

$$A = \{2, 3, 4, 7, 8\}, \quad B = \{4, 5, 7, 9\}$$

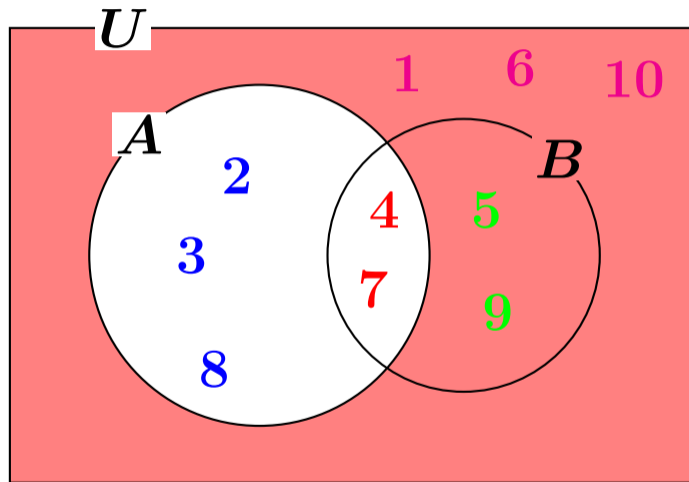




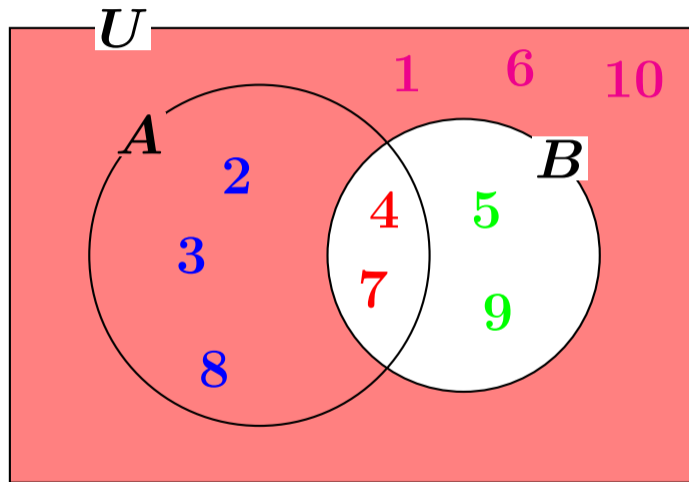
(1)  $\overline{A}$



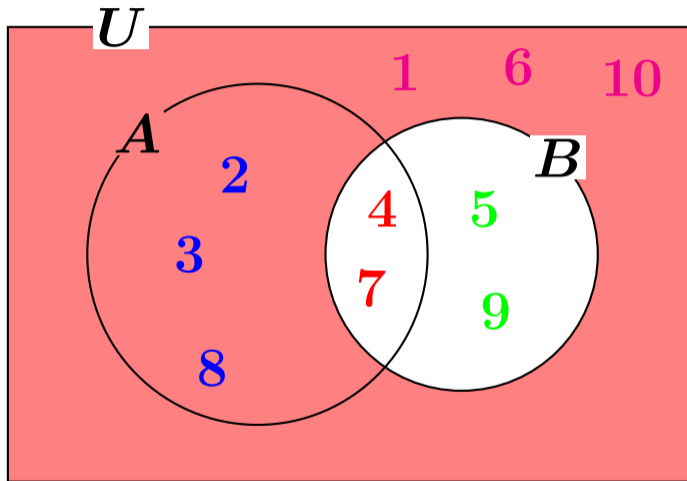
$$(1) \quad \overline{A} = \{1, 5, 6, 9, 10\}$$



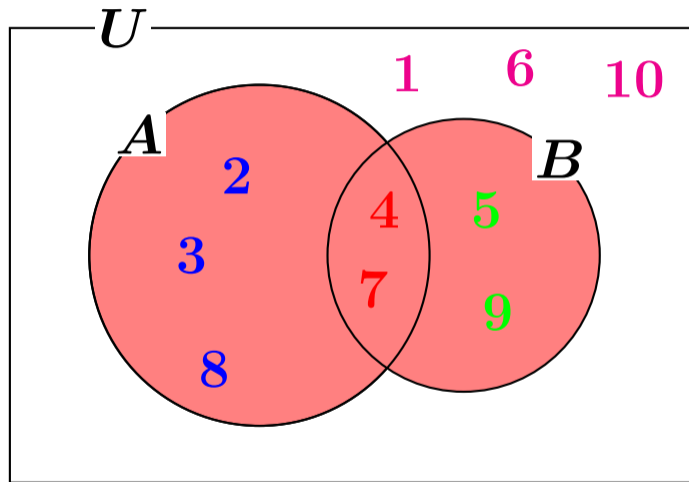
(2)  $\overline{B}$



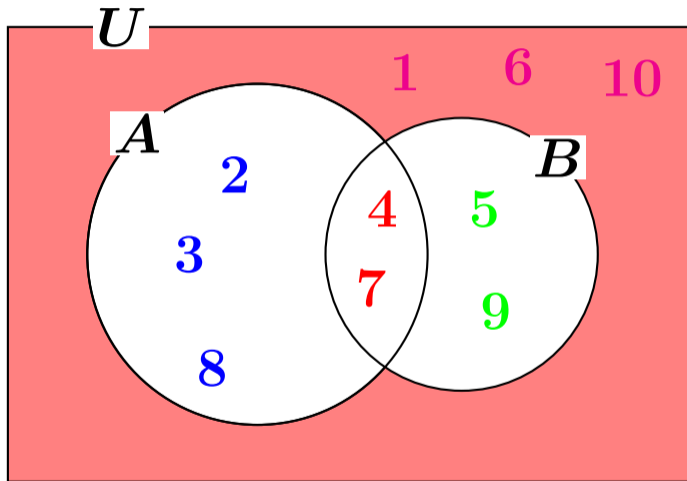
$$(2) \quad \overline{B} = \{1, 2, 3, 6, 8, 10\}$$



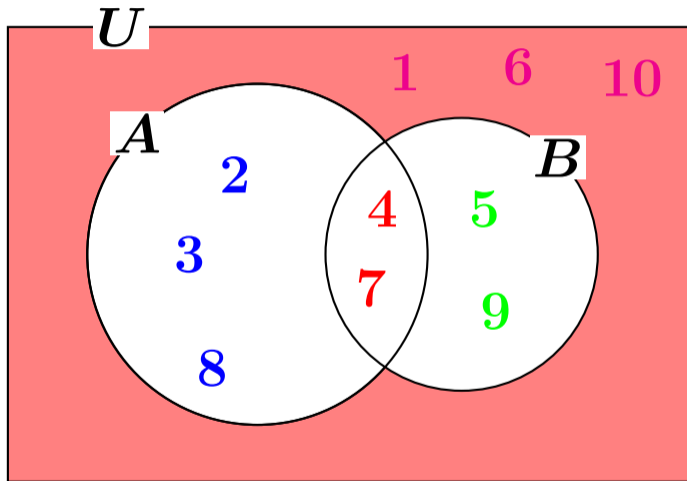
(3)  $A \cup B$  は下図のようになるので ( $\overline{A \cup B}$ ?)



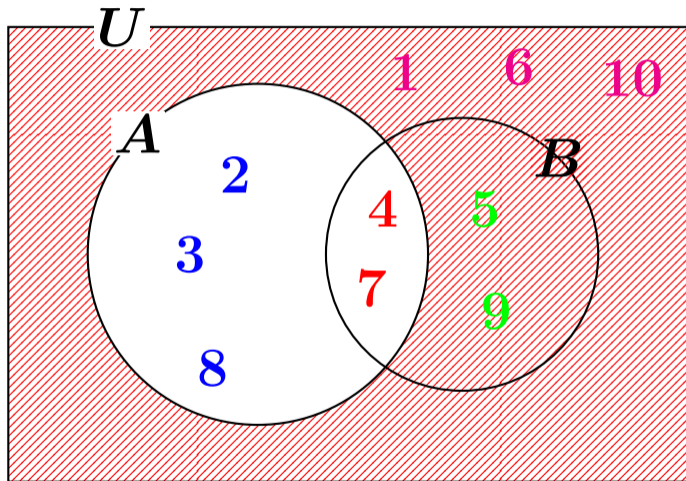
(3)  $\overline{A \cup B}$



$$(3) \quad \overline{A \cup B} = \{1, 6, 10\}$$

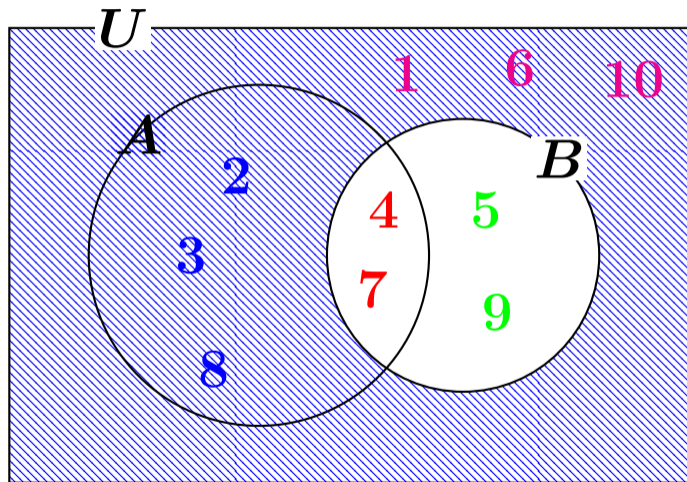


(4)  $\overline{A}$  は以下の部分 ( $\overline{A} \cup \overline{B}$ ?)

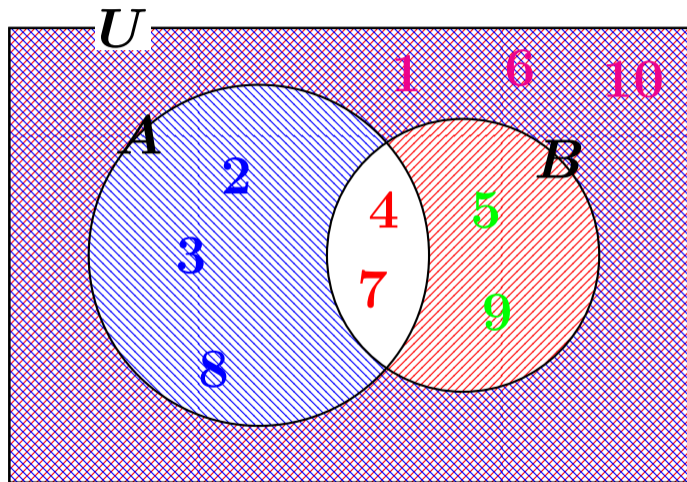




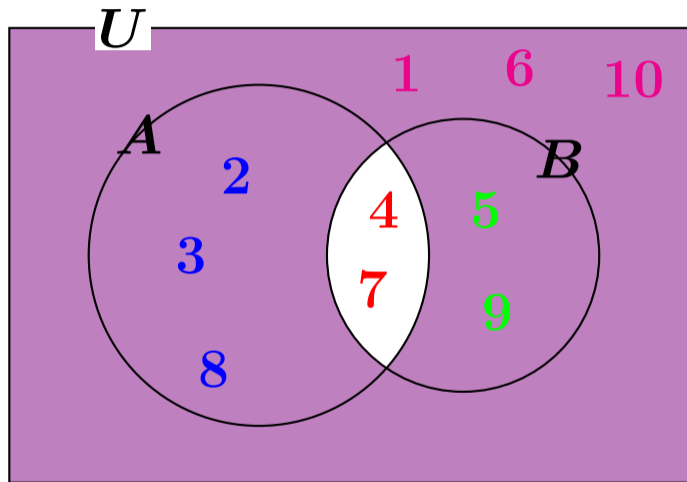
(4)  $\overline{B}$  は以下の部分 ( $\overline{A \cup B}$ ?)



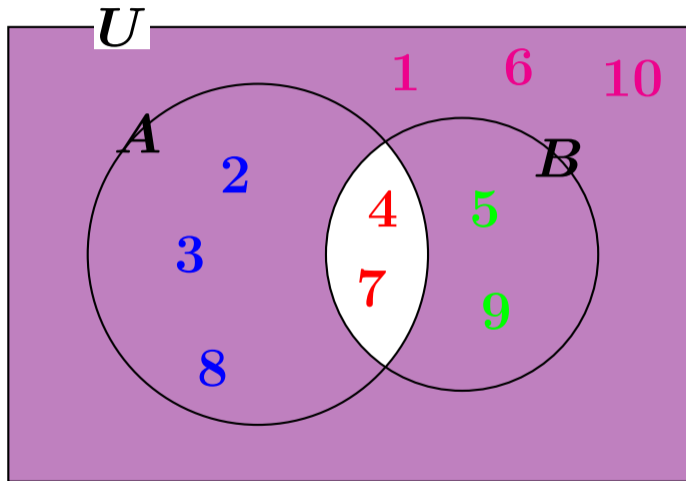
(4)  $\overline{A} \cup \overline{B}$  は赤、青どちらかで塗られた部分



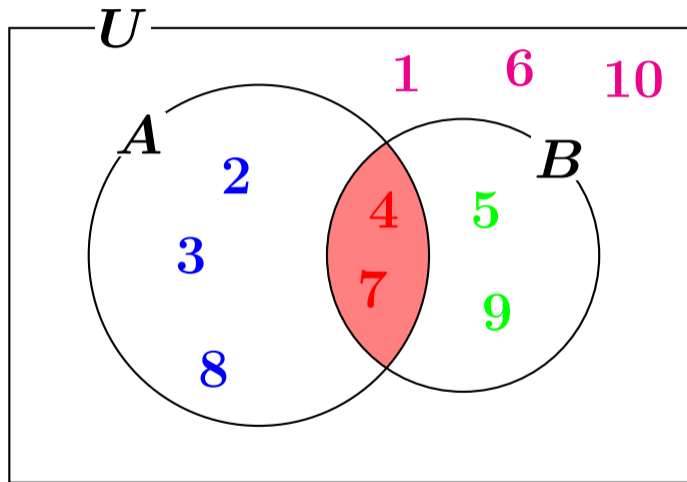
# (4) $\overline{A} \cup \overline{B}$



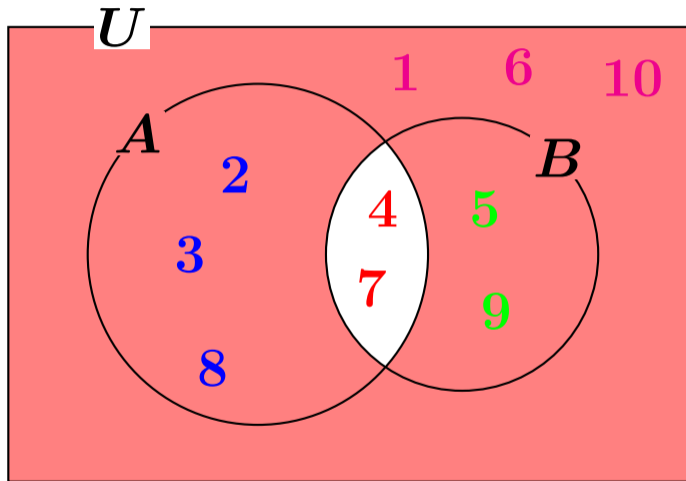
$$(4) \quad \overline{A} \cup \overline{B} = \{1, 2, 3, 5, 6, 8, 9, 10\}$$



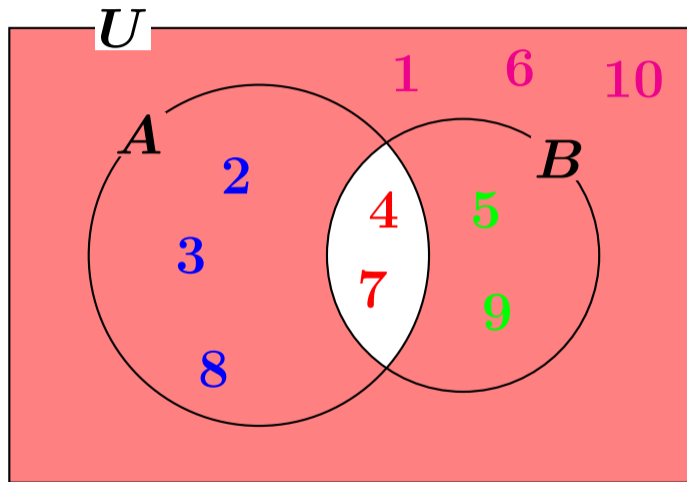
(5)  $A \cap B$  は下図のようになるので ( $\overline{A \cap B}$ ?)



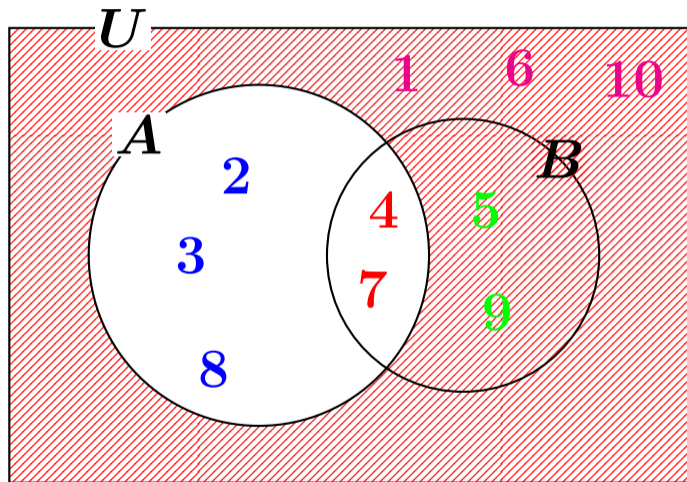
(5)  $\overline{A \cap B}$



$$(5) \quad \overline{A \cap B} = \{1, 2, 3, 5, 6, 8, 9, 10\}$$

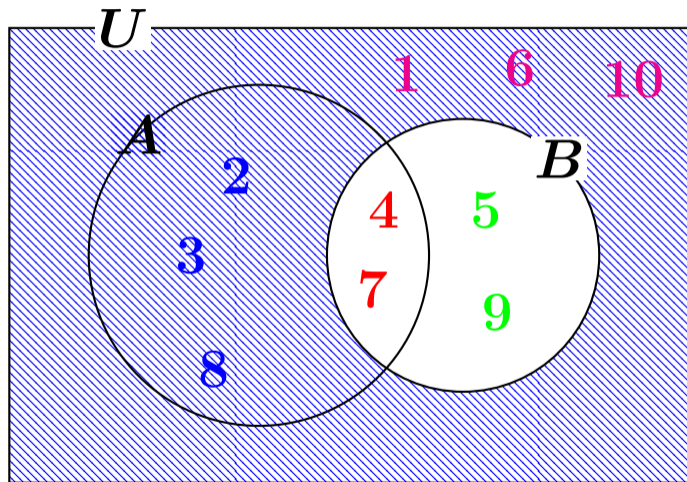


(6)  $\overline{A}$  は以下の部分 ( $\overline{A} \cap \overline{B}$ ?)

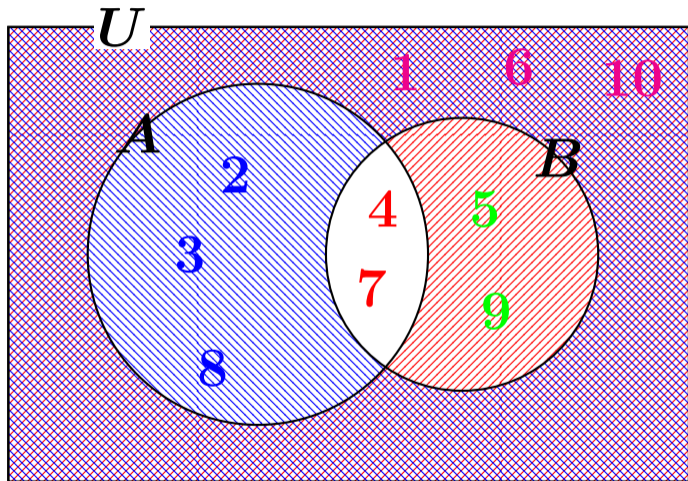




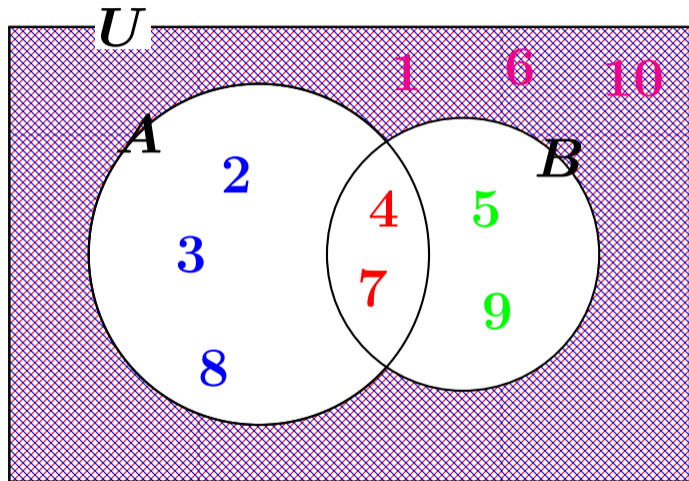
(6)  $\overline{B}$  は以下の部分 ( $\overline{A} \cap \overline{B}$ ?)



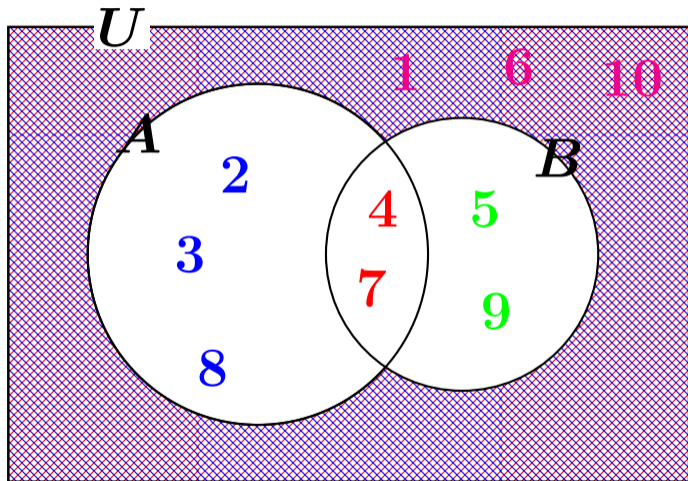
(6)  $\overline{A} \cap \overline{B}$  は赤、青両方で塗られた部分



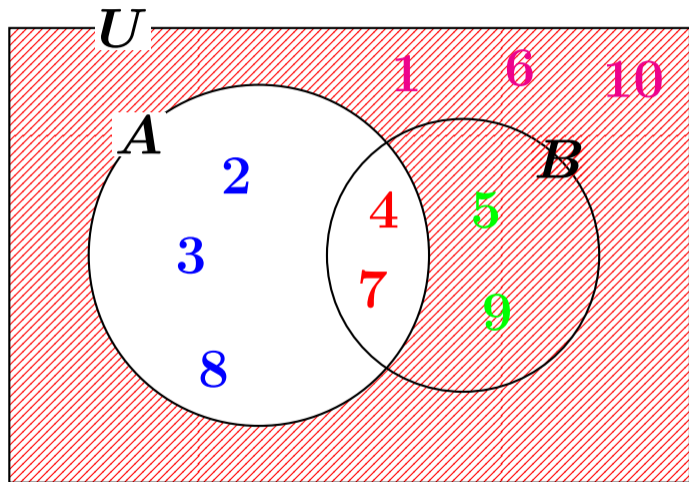
(6)  $\overline{A} \cap \overline{B}$



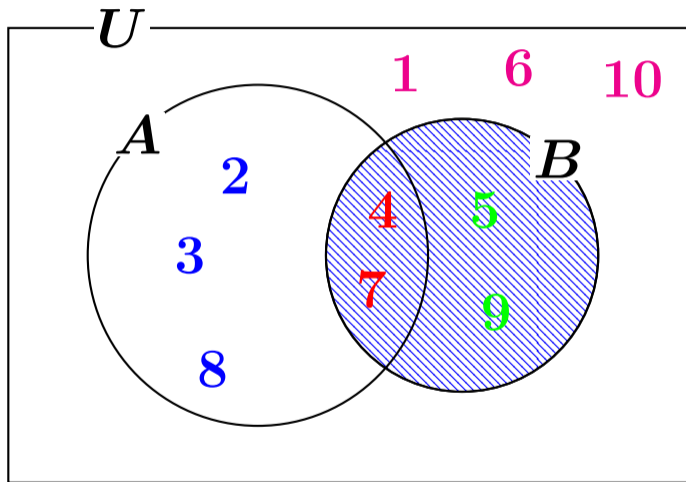
$$(6) \quad \overline{A} \cap \overline{B} = \{1, 6, 10\}$$



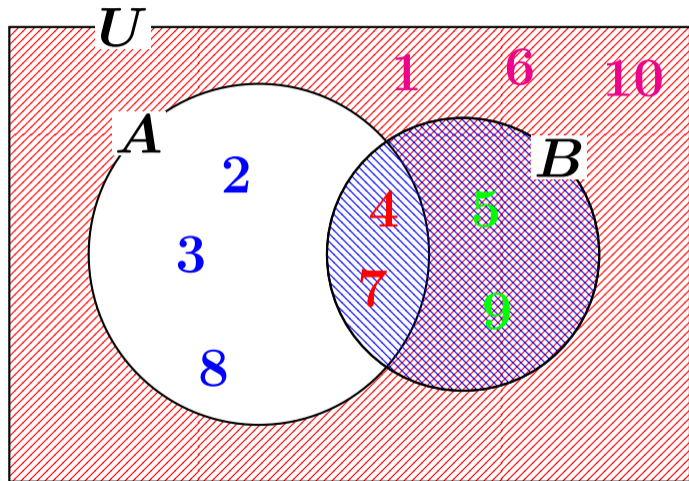
(7)  $\bar{A}$  は以下の部分 ( $\bar{A} \cap B$ ?)



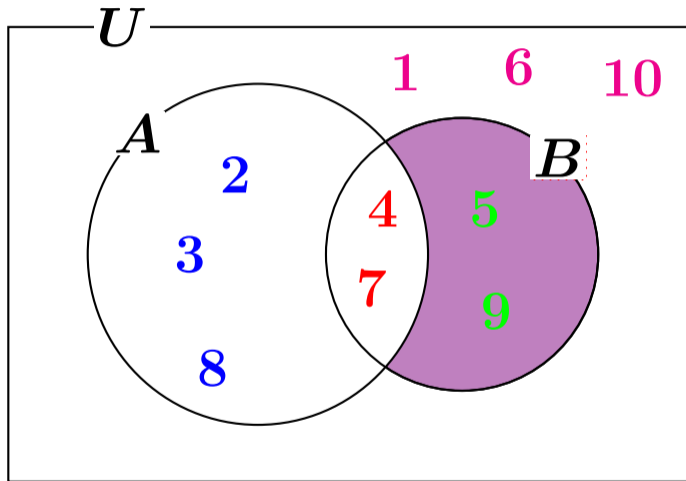
(7)  $B$  は以下の部分 ( $\overline{A} \cap B$ ?)



(7)  $\bar{A} \cap B$  は赤、青両方で塗られた部分

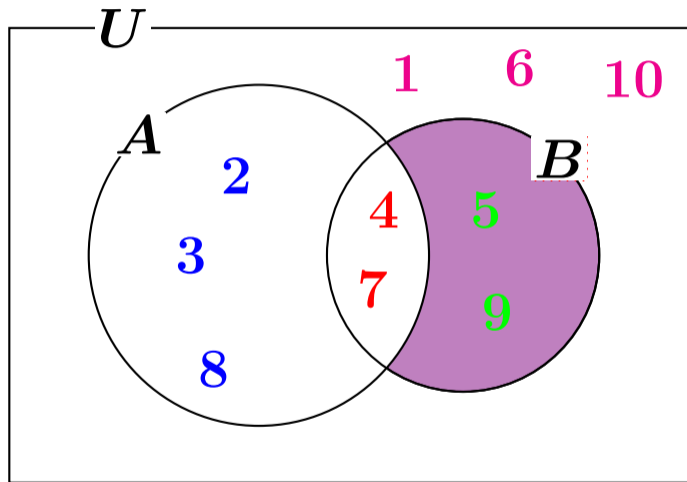


(7)  $\bar{A} \cap B$

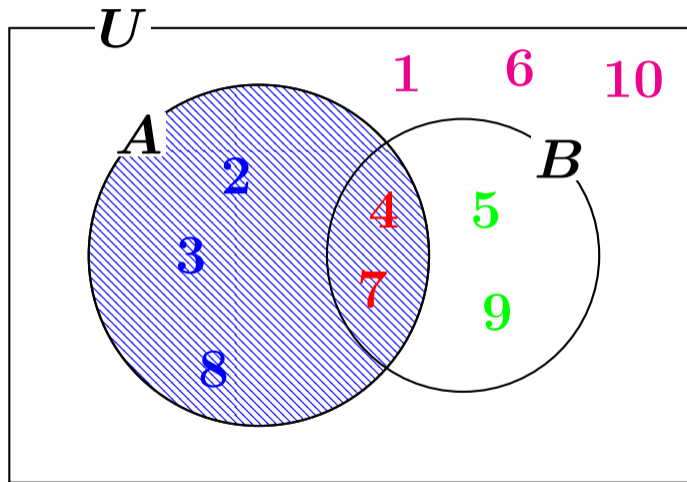




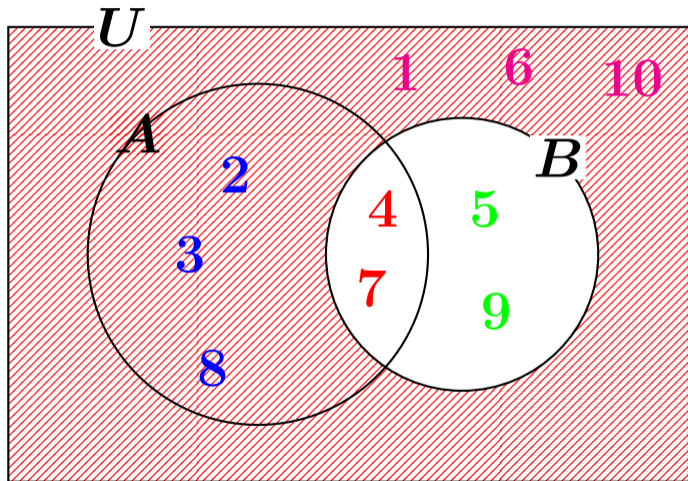
$$(7) \quad \overline{A} \cap B = \{5, 9\}$$



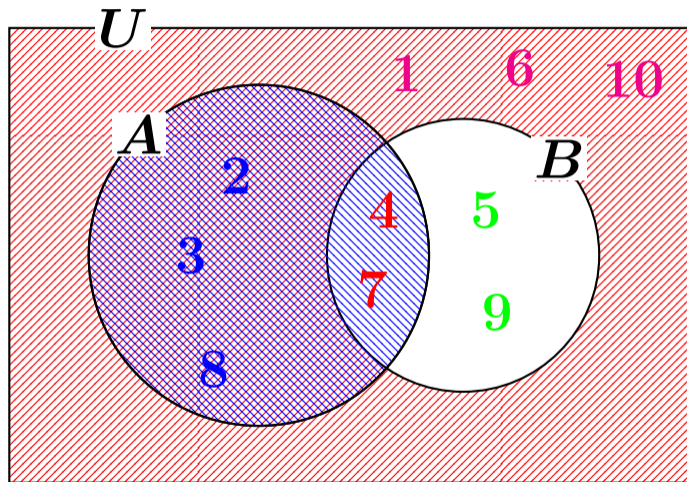
(8)  $A$  は以下の部分 ( $A \cap \overline{B}$ ?)



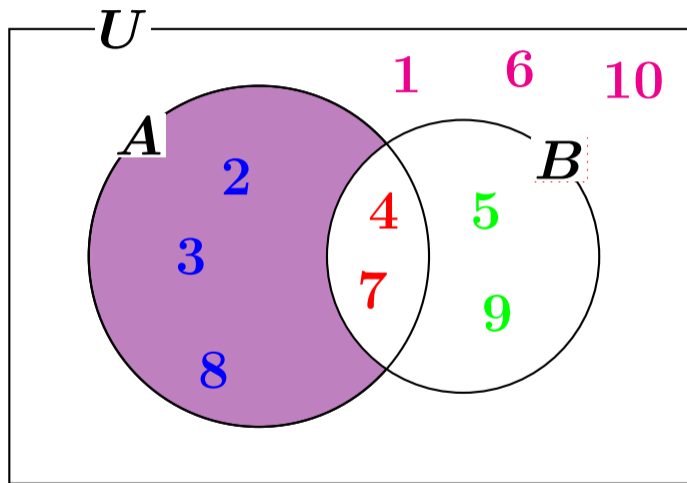
(8)  $\overline{B}$  は以下の部分 ( $A \cap \overline{B}$ ?)



(8)  $A \cap \overline{B}$  は赤、青両方で塗られた部分



(8)  $A \cap \overline{B}$



$$(8) \quad A \cap \overline{B} = \{2, 3, 8\}$$

