

字集 $U = \{0, 1, 2, 3, 4, 5, 6, 7, 8, 9\}$, 且 $A = \{0, 1, 5, 7\}$

$B = \{2, 3, 5, 8\}$, $C = \{5, 6, 9\}$, 試求

- (a) $A \cup B$ (b) $B \cap C$ (c) $\overline{A \cap B}$ (d) $\overline{A} \cap \overline{B}$
 (f) $(A \cap B) \cup (B \cap C)$

(a) $A \cup B = \{0, 1, 2, 3, 5, 7, 8\}$
 聯集 (有就搵出來)

(b) $B \cap C = \{5\}$
 交集 (共同搵)

(A) $\{0, 1, 5, 7\}$
 (B) $\{2, 3, 5, 8\}$

(c) $\overline{A \cap B} = \overline{5} = \{0, 1, 2, 3, 4, 6, 7, 8, 9\}$

(d) $\overline{A} \cap \overline{B} = \{4, 6, 9\}$
 $\overline{A} = \{2, 3, 4, 6, 8, 9\}$
 $\overline{B} = \{0, 1, 4, 6, 7, 9\}$

\cup 聯集
 \cap 交集

(f) $(A \cap B) \cup (B \cap C)$
 $= \{5\} \cup \{5\}$
 $= \{5\}$

$\overline{A \cap B}$ 反向.