1.5 (1) √ (2) × (3) √ (4) √

(5) √ (6) √ (7) √ (8) ×

1.9 (3). $\{2, 3, 4, 5, 6\}$

(4). $\{\phi, \{1\}\}$

1.14 (1) $((A \cup B) \cap B) - (A \cup B)$.

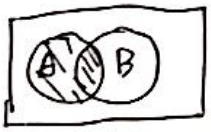
$A \cup B = E$

$\therefore$ 为 ϕ

(2). $((A \cup B \cup C) - (B \cup C)) \cup A$.

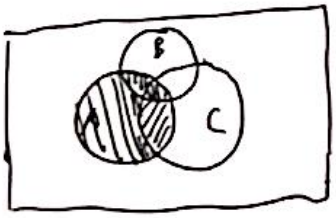
为 A

1.18 (1). $(A \cap B) \cup (A - B)$



A

(3). $((A-B)-C) \cup ((A-B) \cap C) \cup ((A \cap B) - C) \cup (A \cap B \cap C)$.



A

1.21. $(A - B) \cup (B - A)$

$= (A \cap \sim B) \cup (B \cap \sim A)$

$= (A \vee B) \cap (\sim B \cup B) \cap (A \cup \sim A) \cap (\sim B \cup \sim A)$.

$= (A \cup B) \cap E \cap \sim (A \cap B) = (A \cup B) - (A \cap B)$.

1.22 (17). $(A-B)-C$

$= A \cap \sim B \cap \sim C$

$= A \cap \sim (B \cup C)$

$= A - (B \cup C)$.

1.37. (13). $(A-B) \cap (A-C) = \emptyset$.

$\Leftrightarrow A - (B \cap C) = \emptyset$

$\Leftrightarrow A \subseteq B \cap C$.

(41). $(A-B) \cap (A-C) = A$

$\Leftrightarrow A - (B \cup C) = A$.

$\Leftrightarrow A \cap (B \cup C) = \emptyset$.