

§0.8 集合の演算

問題 0.8.1

$$A = \{1, 2, 3, 5, 6, 10, 15, 30\}, \quad B = \{1, 2, 4, 5, 8, 10, 20, 40\}.$$

これより,

$$A \cap B = \{1, 2, 5, 10\}, \quad A \cup B = \{1, 2, 3, 4, 5, 6, 8, 10, 15, 20, 30, 40\}.$$

問題 0.8.2

$$A = \{2, 3, 5, 7\},$$

$$\bar{A} = \{1, 4, 6, 8, 9\}.$$

問題 0.8.3

- (1) $\bar{B} = \{0, 4, 7, 8, 9\}$ なので $A \cap \bar{B} = \{4, 7\}$.
- (2) $\bar{B} = \{0, 4, 7, 8, 9\}$ なので $A \cup \bar{B} = \{0, 1, 2, 4, 7, 8, 9\}$.
- (3) $A \cap B = \{1, 2\}$ なので $\overline{A \cap B} = \{0, 3, 4, 5, 6, 7, 8, 9\}$.
- (4) $A \cup B = \{1, 2, 3, 4, 5, 6, 7\}$ なので $\overline{A \cup B} = \{0, 8, 9\}$.