

Samples Sets

1. For the following questions let $C=\{-1, 2, 4, 6\}$, $F=\{3, 7, -2, 4, 6, 1\}$, $A=\{3, 5, -2\}$
- (1) Write down the elements of set F .
 - (2) Write down the elements of the set $F \cup C$.
 - (3) Write down the elements of the set $C \cap F$.
 - (4) Write down the elements of the set $C \setminus F$.
 - (5) Write down the elements of the set $C \setminus (F \cup A)$. Shade the corresponding region on the Venn diagram.
 - (6) Write down the elements of the set $(F \cup A) \setminus C$.
 - (7) Write down the elements of the set $A \cup (C \cap F)$.
 - (8) Write down the elements of the set $C \cap \emptyset$.
 - (9) Write down the elements of the set $(A \cap C) \setminus (F \setminus A)$.
2. For the following questions let $B=\{-3, 2, 9, 8, 6\}$, $D=\{x \mid x \in \mathbb{N}, 2 \leq x < 5\}$, $G=\{-3, 3, -1, -2\}$
- (1) Write down the elements of set G .
 - (2) Write down the elements of the set $B \cup D$.
 - (3) Write down the elements of the set $D \cap G$.
 - (4) Write down the elements of the set $D \setminus B$.
 - (5) Write down the elements of the set $G \setminus (B \cup D)$. Shade the corresponding region on the Venn diagram.
 - (6) Write down the elements of the set $(D \setminus G) \cap B$.
 - (7) Write down the elements of the set $G \cap (D \cup B)$.
 - (8) Write down the elements of the set $D \setminus \emptyset$.
 - (9) Write down the elements of the set $(G \cup B) \setminus (B \cap D)$.
3. For the following questions let $F=\{3, 5, 9\}$, $C=\{-3, 3, 0, 9, 4, 8, 1\}$, $E=\{z \mid z \in \mathbb{N}, 4 < z \leq 7\}$
- (1) Write down the elements of set F .
 - (2) Write down the elements of the set $C \cup F$.
 - (3) Write down the elements of the set $F \cap E$.
 - (4) Write down the elements of the set $F \setminus E$.
 - (5) Write down the elements of the set $C \setminus (E \cup F)$. Shade the corresponding region on the Venn diagram.
 - (6) Write down the elements of the set $(E \cup F) \setminus C$.
 - (7) Write down the elements of the set $F \cap (E \setminus C)$.
 - (8) Write down the elements of the set $\emptyset \cup C$.
 - (9) Write down the elements of the set $(F \setminus F) \setminus (E \setminus C)$.