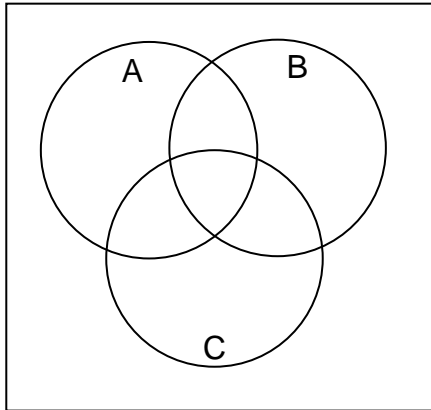


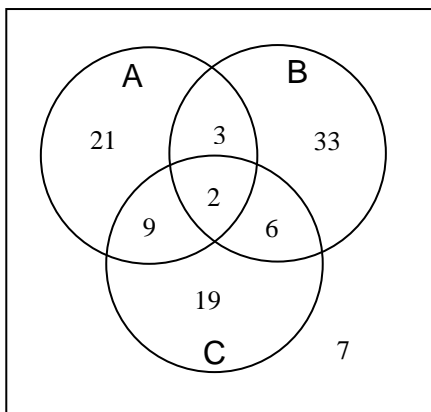
- 1 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 100$, $n(A) = 35$, $n(B) = 44$, $n(C) = 36$, $n(A \cap B) = 5$, $n(A \cap C) = 11$, $n(B \cap C) = 8$ and $n(A' \cap B' \cap C') = 7$, find:

- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- 1 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 100$, $n(A) = 35$, $n(B) = 44$, $n(C) = 36$, $n(A \cap B) = 5$, $n(A \cap C) = 11$, $n(B \cap C) = 8$ and $n(A' \cap B' \cap C') = 7$, find:

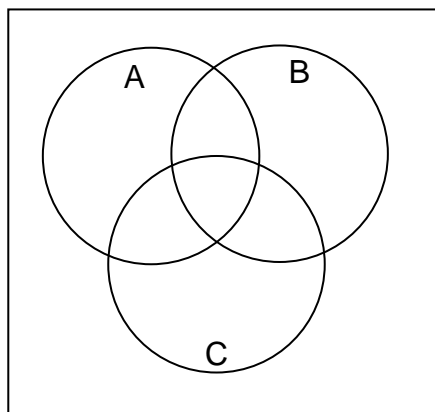
- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- (i) 3
- (ii) 14
- (iii) 19

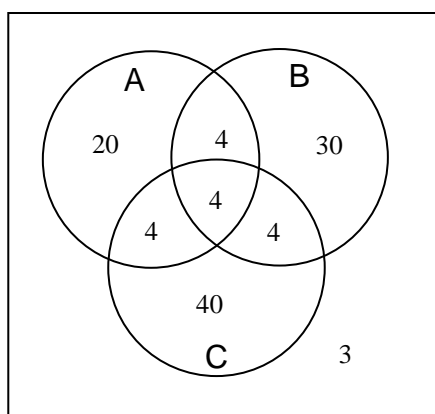
- 2 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 120$, $n(A) = 32$, $n(B) = 42$, $n(C) = 52$, $n(A \cap B) = 8$, $n(A \cap C) = 8$, $n(B \cap C) = 8$ and $n(A' \cap B' \cap C') = 14$, find:

- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- 2 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 120$, $n(A) = 32$, $n(B) = 42$, $n(C) = 52$, $n(A \cap B) = 8$, $n(A \cap C) = 8$, $n(B \cap C) = 8$ and $n(A' \cap B' \cap C') = 14$, find:

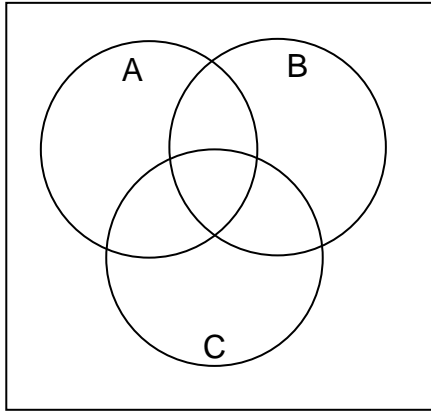
- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- (i) 4
- (ii) 12
- (iii) 40

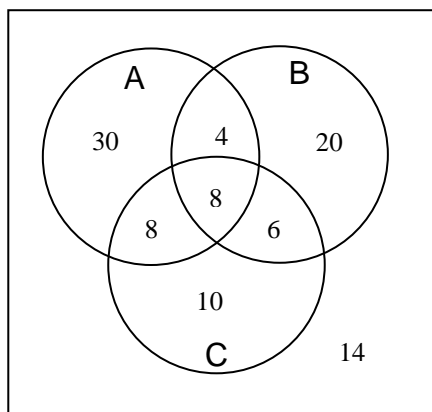
- 3 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 100$, $n(A) = 50$, $n(B) = 38$, $n(C) = 32$, $n(A \cap B) = 12$, $n(A \cap C) = 16$, $n(B \cap C) = 14$ and $n(A' \cap B' \cap C') = 14$, find:

- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- 3 Consider three subsets A, B and C of a universal set U. Given that $n(U) = 100$, $n(A) = 50$, $n(B) = 38$, $n(C) = 32$, $n(A \cap B) = 12$, $n(A \cap C) = 16$, $n(B \cap C) = 14$ and $n(A' \cap B' \cap C') = 14$, find:

- (i) $n(A \cap B \cap C')$
- (ii) $n((A \cap B) \cup (A \cap C))$
- (iii) $n(A' \cap B' \cap C)$



- (i) 4
- (ii) 20
- (iii) 10