

Section 2.4

When using set operations involving three sets, begin by performing operations within parentheses.

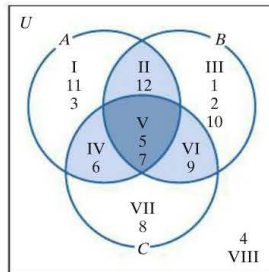
Example 1: Given $U = \{a, b, c, d, e, f\}$, $A = \{a, b, c, d\}$, $B = \{a, b, d, f\}$, $C = \{b, c, f\}$, find each of the following sets:

a. $A \cup (B \cap C)$

b. $(A \cup B) \cap (A \cup C)$

c. $A \cap (B \cup C')$

Example 2: Use the Venn diagram below to determine each of the following sets:



a. C

b. $B \cup C$

c. $A \cap C$

d. B'

e. $A \cup B \cup C$