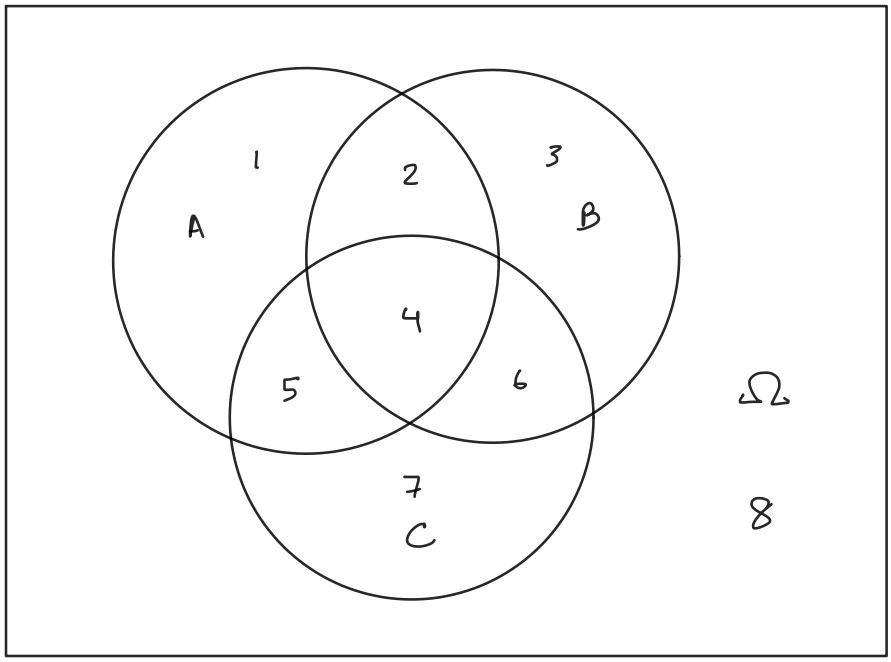
Problem 1: Venn Diagrams

Saturday, March 28, 2020 9:27 PM



$E1 = A \cap B \cap C \leftarrow 4$

$E2 = (A \cap B \cap C)^c \leftarrow 1, 2, 3, 5, 6, 7$

$E3 = A \cap B \cap C^c \leftarrow 2$

$E4 = B \cup (B^c \cap C^c) \leftarrow$

$E5 = A^c \cap B^c \cap C^c \leftarrow 8$

$E6 = (A \cap B) \cup (A \cap C) \cup (B \cap C) \leftarrow 2, 4, 5, 6$

$(2,4) + (5,4) + (4,6)$

$E7 = (A \cap B^c \cap C^c) \cup (A^c \cap B \cap C^c) \cup (A^c \cap B^c \cap C)$

$[(1,2,5,4) \cap (1,5,7,8) \cap (1,2,3,8)] \cup [(3,7,8) \cap (3,3,4,6) \cap (1,2,3,8)] \cup [(3,6,7,8) \cap (1,5,7,8) \cap$

$[1] \cup [3] \cup [\quad = 1, 3$