2. Let $A = \{a, b, c\}, B = \{b, c, d\}, and\ C = \{b, c, e\}$.

a. Find $A \cup (B \cap C), (A \cup B) \cap C, and\ (A \cup B) \cap (A \cup C)$. Which of these sets are equal?

ABC, a, b, c abcd ∩ abce
abc

b. Find $A \cap (B \cup C), (A \cap B) \cup C, and\ (A \cap B) \cup (A \cap C)$. Which of these sets are equal?

abc ∩ bcde abcde bc bc
bc bc

c. Find $(A - B) - C\ and\ A - (B - C)$. Are these sets equal?

a abcd