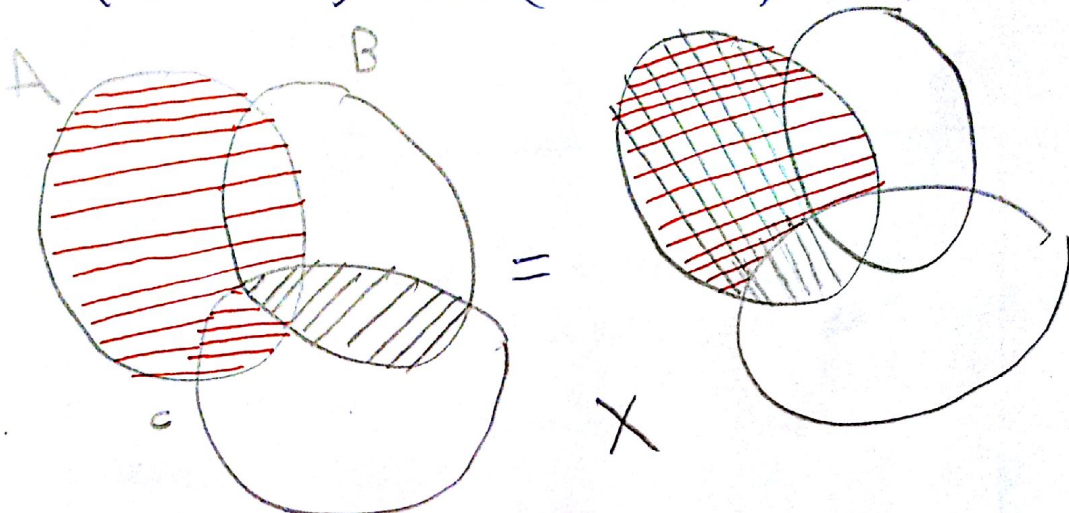


$$A - (B \cap C) = (A - B) \cap (A - C)$$



$$A = \{2, 3, 4\}$$

$$B = \{4, 7, 5\}$$

$$C = \{5, 3\}$$

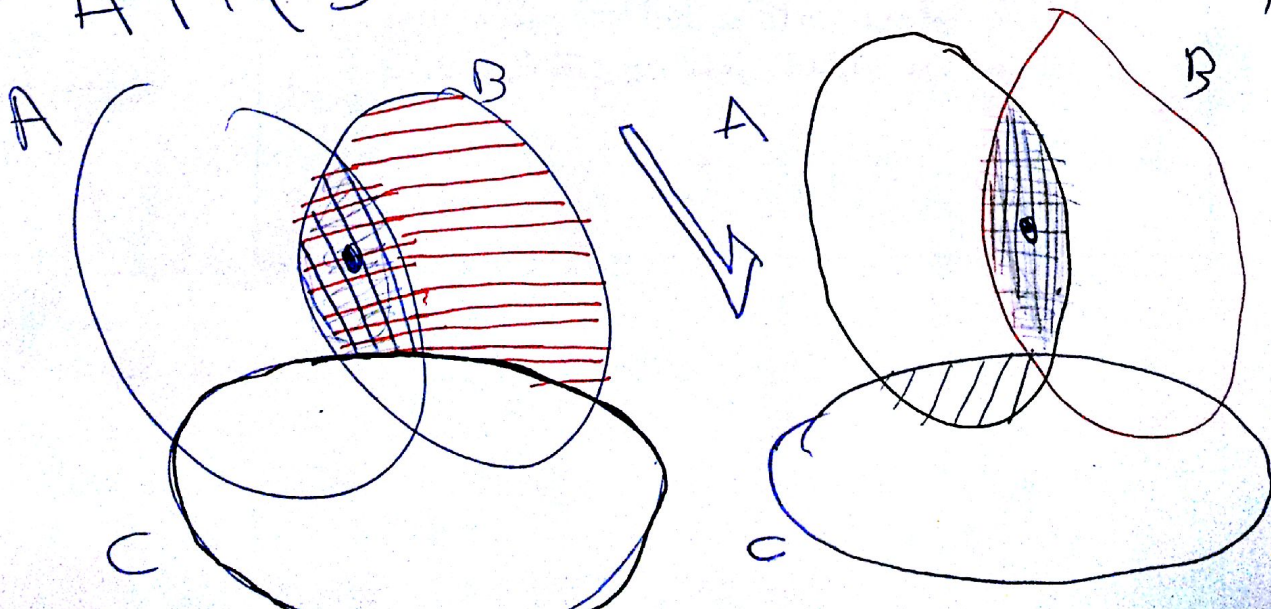
~~$$\{2, 3, 4, 5\} - \{5\} = \{2, 3, 4\}$$~~

~~$$\{2, 3, 4\} - \{5\} = \{2, 3, 4\}$$~~

~~$$\{2, 3\} \cap \{3\} = \{3\}$$~~

X

$$A \cap (B - C) = A \cap B - (A \cap C)$$





$$\forall x \in A \cap (B - C)$$

$$(x \in A \wedge x \in (B - C))$$

$$x \in A \wedge x \in B \wedge x \notin C$$

$$(x \in A \wedge x \in B) \wedge (x \in A \wedge x \notin C)$$

$$x \in A \cap B \quad \wedge \quad x \notin A \cap C$$

$$(A \cap B) - (A \cap C)$$

$$\begin{aligned}
 & (A \cap B) - (A \cap C) \\
 &= (A \cap B) \cap (A \cap C)^c \\
 & (A \cap B) \cap (\bar{A} \cup \bar{B}^c)
 \end{aligned}$$

ن ا ب ا ب و ت جمع

$$B \cap \left[ (A \cap \bar{A}) \cup (A \cap \bar{C}) \right]$$

$$B \cap A \cap \bar{C} \qquad A \cap (B \cap \bar{C})$$

$$A \cap (B - C)$$