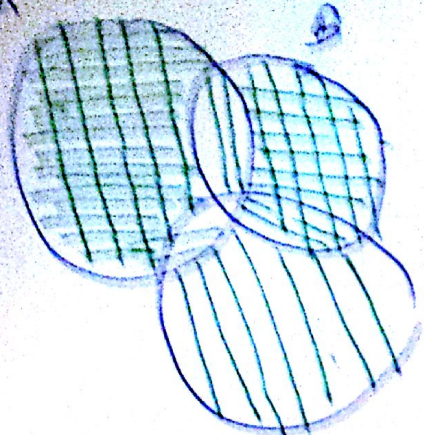
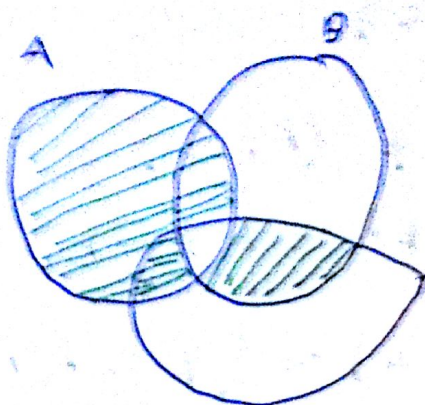


$$\S \text{ } A + (B \cap C) = (A + B) \cap (A + C) \text{ دل}$$



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



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

X

$$\begin{aligned} A &= \{1, 2, 3\} \\ B &= \{2, 3, 4, 5\} \\ C &= \{1, 3, 5, 6, 7\} \end{aligned}$$

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

$$A + \{3, 5\} = \{1, 2, 5\}$$

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

$$\{1, 4, 5\} \cap \{2, 5, 6, 7\} = \{5\}$$

$$A \cap (B - C) = (A \cap B) - (A \cap C) \text{ اثبت ان}$$

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

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

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

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

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

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

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

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

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

~~نتیجه~~

$$(x \in A \wedge x \in B) \wedge x \notin C \Rightarrow A \cap (B - C)$$

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

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

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

در اینجا

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

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

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

$$\text{sup } P \not\Rightarrow \text{max}$$

$$\text{max} \Rightarrow \text{sup}$$

$$\text{min} \Rightarrow \text{inf}$$

$$\text{inf} \not\Rightarrow \text{min}$$

$$R \subseteq$$

$$B = (1, 2)$$

$$\text{sup } B = 2$$

$$\text{max } B = \text{وجود ندارد}$$

أوجد القيم العظمى والقصى و الحدود العلوية والسفلية و  $\sup B$  و  $\inf B$  و  
 والأخير ان وجدت للمجموعات  $B$  حيث  $A = \mathbb{N}$  كل طرفه عد  
 والحد الاول

$(a, b) : (a \in B \Rightarrow a | b)$

$B = \{6, 15, 9\}$

الحدود العلوية

$90, 180, 270$

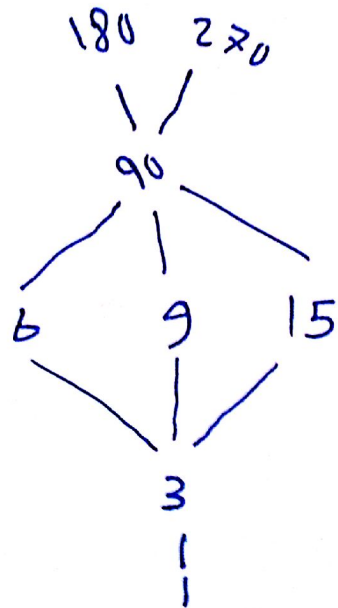
( $90$  وسطا غفائما)

$\sup B = 90$

الحدود السفلية

$3, 1$

$\inf B = 3$



$\max B =$  غير موجود

$\min B =$  غير موجود

الحد الاول :  $6, 9, 15$

الحد الاخير :  $6, 9, 15$

