Jalapa, 05 de agosto de 2023

- Universidad Mariano Gálvez de Guatemala.
  - Matemática Discreta.
  - Ing. Marlon Toledo.

Tarea #3.

Teniendo:

- A = {x/x números enteros positivos <17}
- B = {x/x primeras 10 letras del alfabeto}
- C = {2, 4, 6, 8, 10, 12, 14, 16}
- D = {M, U, r, C, i, a, l, a, g, o}
- E = {x/x símbolos utilizados en el sistema de numeración Hexadecimal}

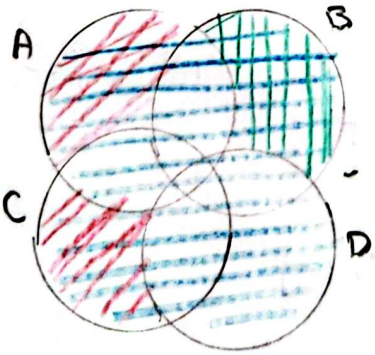
Calcular:

- $(A+C) \cup (B-D)$

$(A+C) = \{1, 3, 5, 7, 9, 11, 13, 15\}$

$(B-D) = \{B, d, f, h, j\}$

$(A+C) \cup (B-D) = \{1, 3, 5, 7, 9, 11, 13, 15, B, d, f, h, j\}$

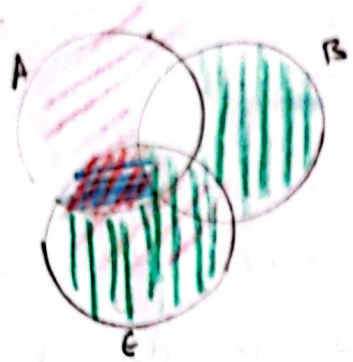


$(\epsilon \cap A) - (\epsilon \cup B)$

$(\epsilon \cap A) = \{1,2,3,4,5,6,7,8,9\}$

$(\epsilon \cup B) = \{A,B,C,D,\epsilon,F,G,H,I,J,1,2,3,4,5,6,7,8,9\}$

$(\epsilon \cap A) - (\epsilon \cup B) = \{\emptyset\}$



$(A \cap C \cap \epsilon) + (B \cup D)$

$(A \cap C) = \{2,4,6,8,10,12,14\}$

$(A \cap C \cap \epsilon) = \{2,4,6,8\}$

$(B \cup D) = \{A,B,C,D,\epsilon,F,G,H,I,J,M,U,R,L,\Theta\}$

$(A \cap C \cap \epsilon) + (B \cup D) = \{2,4,6,8,A,B,C,D,\epsilon,F,G,H,I,J,M,U,R,L,\Theta\}$

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

$A = (\epsilon - A) = \{A,B,C,D,\epsilon,F\}$

$B = (A \cup B \cup C) = \{1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,A,B,C,D,\epsilon,F\}$

$A \cap B = \{A,B,C,D,\epsilon,F\}$