$U = \{x \mid x \in Z\}$, $A = \{1, 2, 4, 7\}$

$B = \{x \mid x \in Z$; x es impar;

$0 < x < 20$; x es divisible entre 3

$C = \{2, 3, 4, 5, 8, 10\}$

$D = \{x \mid x \in Z$; x es primo; $1 < x < 30$.

Calcular

1. $[(A \oplus B) - (C \cup D)]'$
2. $[(C \cup D') - (A' \oplus B')] \cap B$

1. $[(A \oplus B) - (C \cup D)]'$

$[([A \cup B] - [A \cap B]) - (C \cup D)]$

(1: $A \cup B$; 2: $A \cap B$; 3: –; 4: $C \cup D$; 5)

~~$A \cup B = \{$~~

$B = \{3, 6, 9, 12, 15, 18\}$ ~~21, 24, 27~~

1 $A \cup B = \{1, 2, 3, 4, 6, 7, 9, 12, 15, 18\}$

2 $A \cap B = \emptyset$

3 $(A \cup B) - (A \cap B) =$

$\{1, 2, 3, 4, 6, 7, 9, 12, 15, 18\} - \{\emptyset\} =$

$\{1, 2, 3, 4, 6, 7, 9, 12, 15, 18\} = A \oplus B$

4 $D = \{2, 3, 5, 7, 11, 13, 17, 19, 23, 29\}$

$C \cup D = \{2, 3, 4, 5, 7, 8, 10, 11, 13, 17, 19, 23, 29\}$

$(A \oplus B) - (C \cup D) =$

$\{1, 6, 8, 9, 10, 11, 13, 12, 15, 17, 18, 19, 23, 29\}$

$[(A \oplus B) - (C \cup D)]' =$

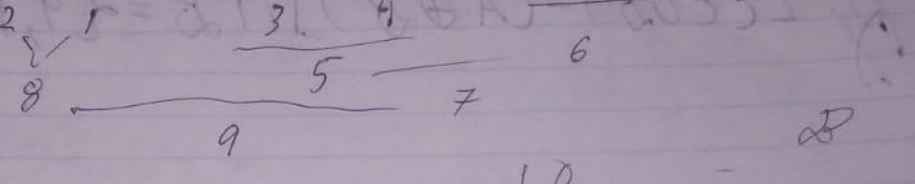
~~$\{2, 3, 4, 5, 7, 8, 9, 10,$~~

$\{2, 3, 4, 5, 7, 16, 14, 20, 21, 22, 24, 25, 26, 27, 28\}$

$[(A \oplus B) - (C \cup D)]' = \{2, 3, 4, 5, 7, 14, 16, 20, 21, 22, 24, 25, 26, 27, 28, 9, 12, 18\}$

2 $[(C \cup D') - (A' \oplus B')] \cap B$

$[(C \cup D') - [(A' \cup B') - (A' \cap B')]] \cap B$



2.1 $D' = \{4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28\}$

$C \cup D' = \{2, 3, 4, 6, 5, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28\}$

$A' = \{3, 5, 6\}$

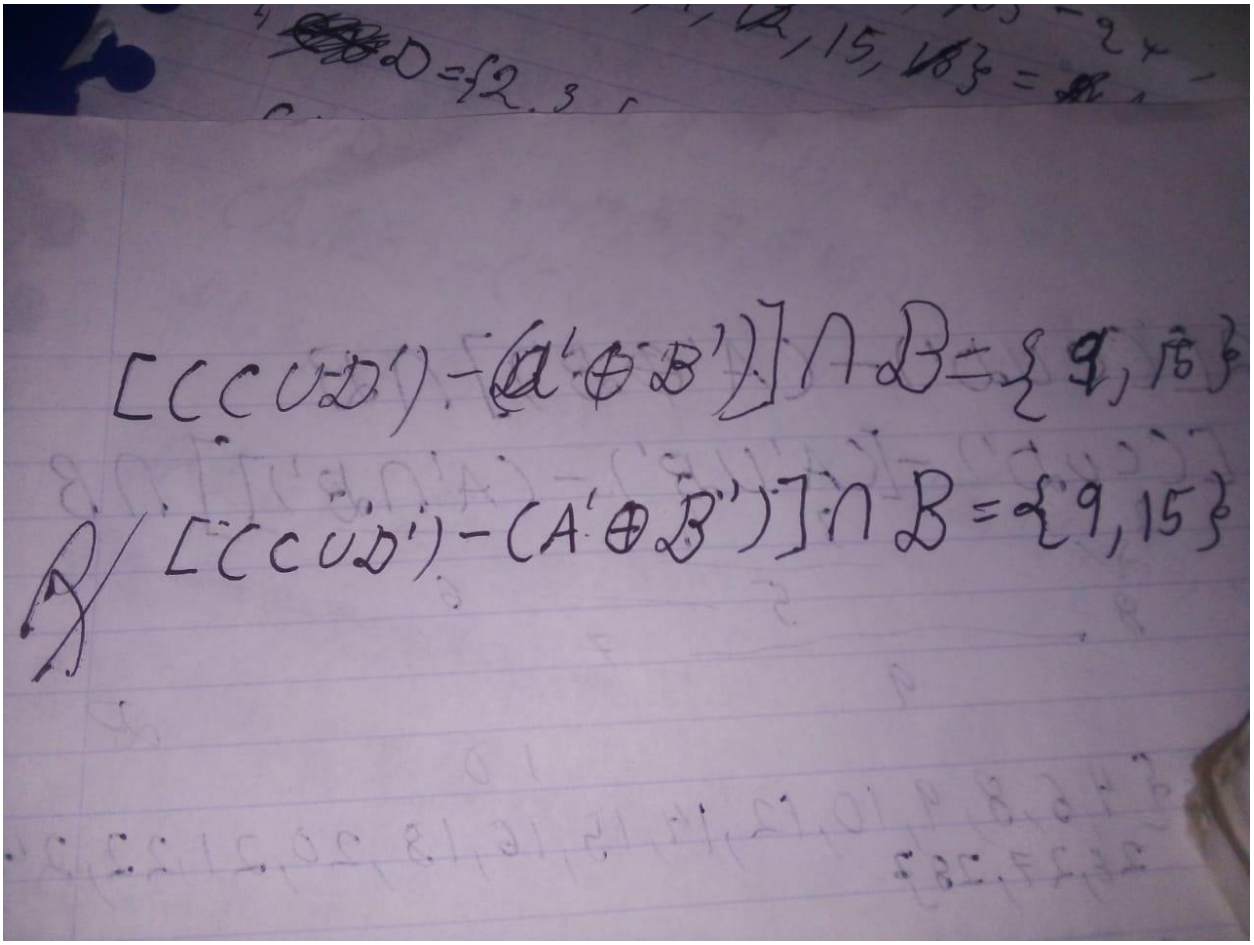
$B' = \{2, 4, 8, 10, 14, 16, 20, 22, 26, 28\}$

$A' \cup B' = \{2, 3, 4, 5, 6, 8, 10, 14, 16, 20, 22, 26, 28\}$

$A' \cap B' = \{\emptyset\}$

$A' \oplus B' = \{2, 3, 4, 5, 6, 8, 10, 14, 16, 20, 22, 26, 28\}$

$[(C \cup D') - (A' \oplus B')] = \{9, 12, 15, 18, 21, 24, 25, 27\}$



$[(C \cup D') - (A' \oplus B')] \cap B = \{9, 15\}$

$[(C \cup D') - (A' \oplus B')] \cap B = \{9, 15\}$