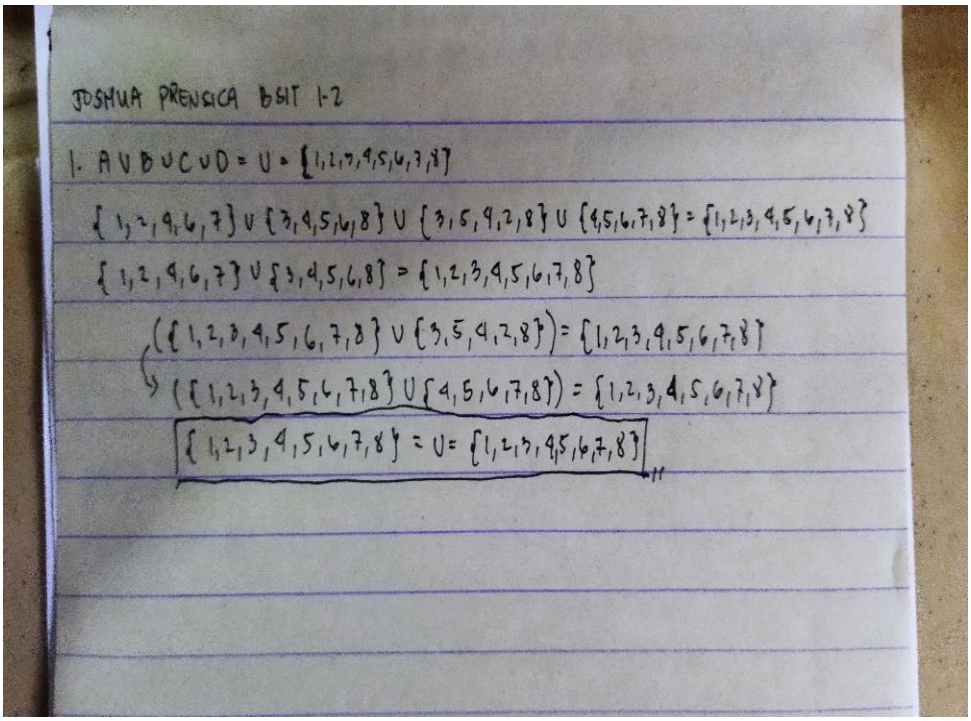
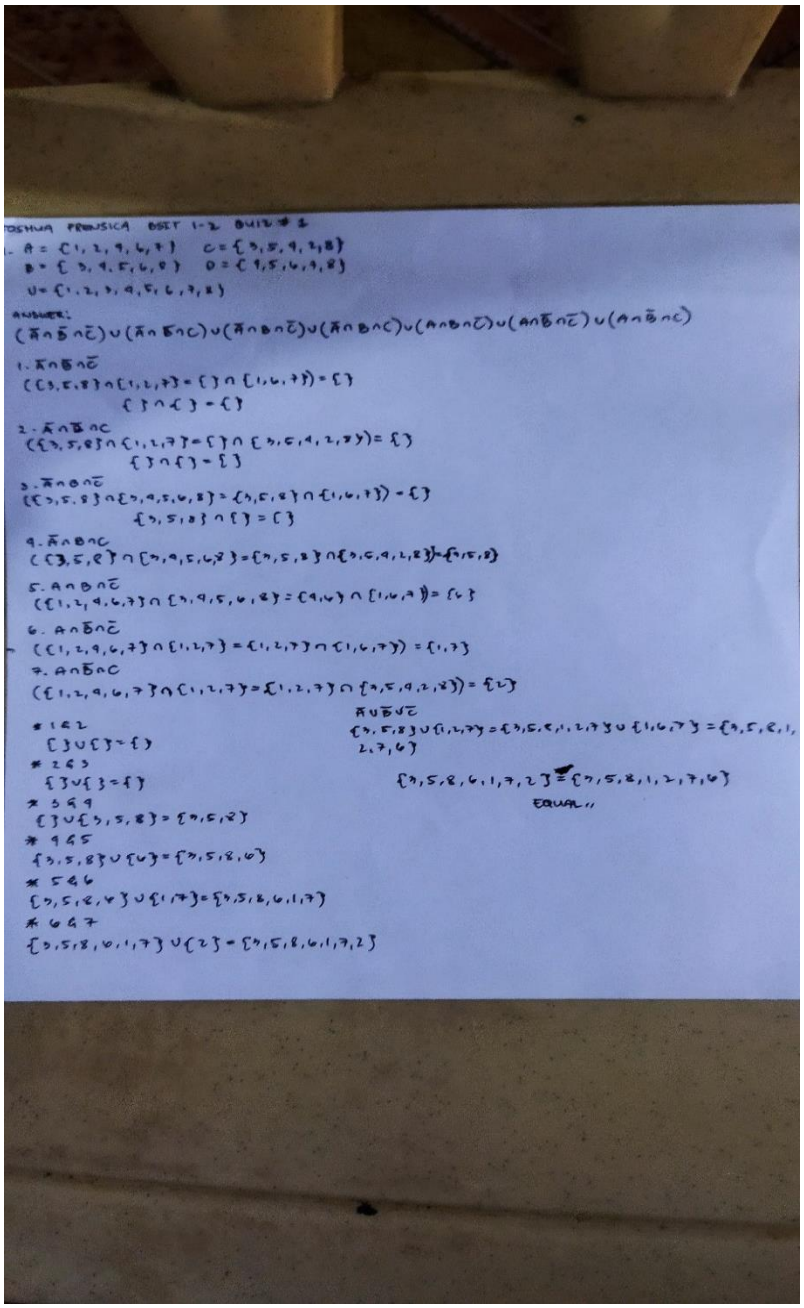
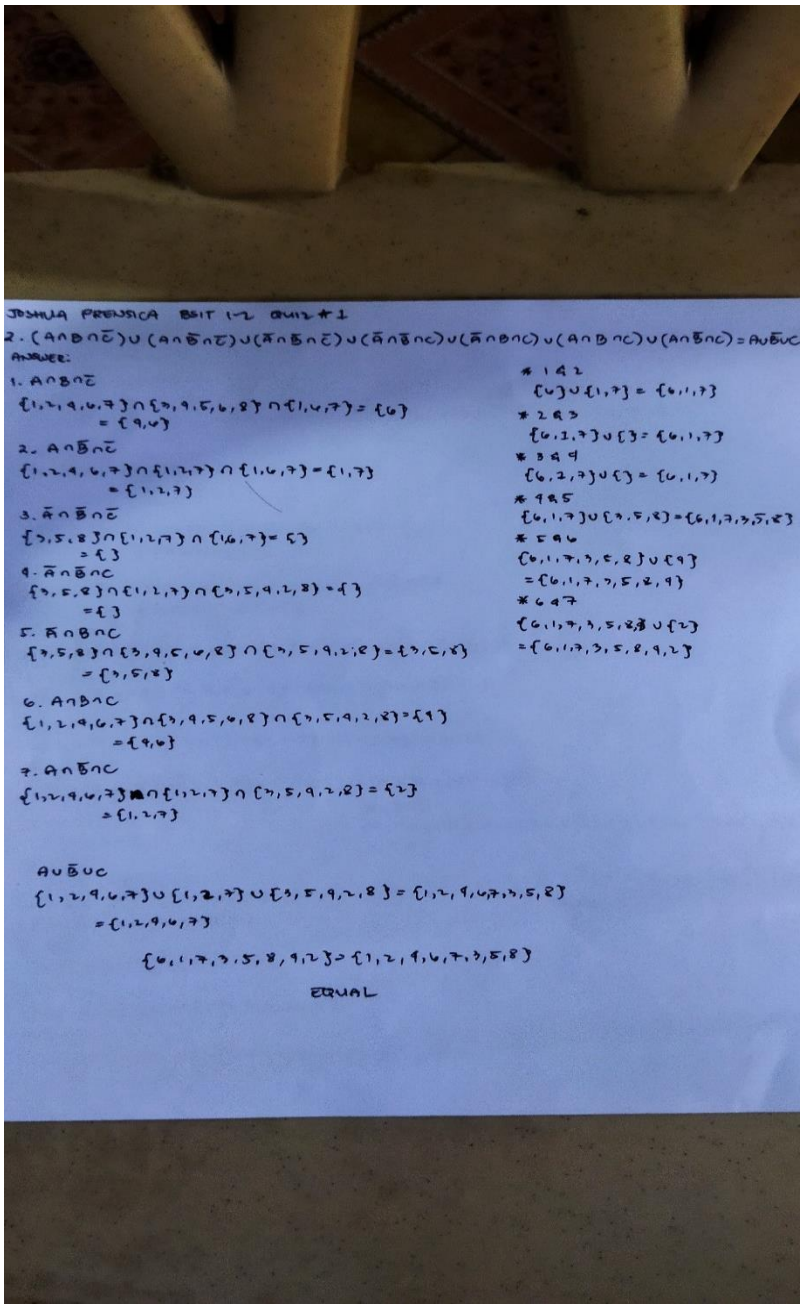
PRENSICA, JOSHUA QUIZ 1 PART 1



PRENSICA, JOSHUA QUIZ 1 PART 2



PRENSICA, JOSHUA QUIZ 1 PART 3



JOSHUA PRENSICA BSIT 1-2 QUIZ # 1

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

ANSWER:

1. $A \cap B \cap \bar{C}$

$\{1,2,4,6,7\} \cap \{3,4,5,6,8\} \cap \{1,6,7\} = \{6\}$

$= \{4,6\}$

2. $A \cap \bar{B} \cap \bar{C}$

$\{1,2,4,6,7\} \cap \{1,2,3,7\} \cap \{1,6,7\} = \{1,7\}$

$= \{1,2,3\}$

3. $\bar{A} \cap \bar{B} \cap \bar{C}$

$\{3,5,8\} \cap \{1,2,3\} \cap \{1,6,7\} = \{\}$

$= \{\}$

4. $\bar{A} \cap \bar{B} \cap C$

$\{3,5,8\} \cap \{1,2,3\} \cap \{3,5,4,2,8\} = \{\}$

$= \{\}$

5. $\bar{A} \cap B \cap C$

$\{3,5,8\} \cap \{3,4,5,6,8\} \cap \{3,5,4,2,8\} = \{3,5,8\}$

$= \{3,5,8\}$

6. $A \cap B \cap C$

$\{1,2,4,6,7\} \cap \{3,4,5,6,8\} \cap \{3,5,4,2,8\} = \{4\}$

$= \{4,6\}$

7. $A \cap \bar{B} \cap C$

$\{1,2,4,6,7\} \cap \{1,2,3\} \cap \{3,5,4,2,8\} = \{2\}$

$= \{1,2,3\}$

$A \cup \bar{B} \cup C$

$\{1,2,4,6,7\} \cup \{1,2,3\} \cup \{3,5,4,2,8\} = \{1,2,4,6,7,3,5,8\}$

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

$\{6,1,7,3,5,8,4,2\} = \{1,2,4,6,7,3,5,8\}$

EQUAL

* 1 & 2

$\{6\} \cup \{1,7\} = \{6,1,7\}$

* 2 & 3

$\{6,1,7\} \cup \{\} = \{6,1,7\}$

* 3 & 4

$\{6,2,7\} \cup \{\} = \{6,1,7\}$

* 4 & 5

$\{6,1,7\} \cup \{3,5,8\} = \{6,1,7,3,5,8\}$

* 5 & 6

$\{6,1,7,3,5,8\} \cup \{4\}$

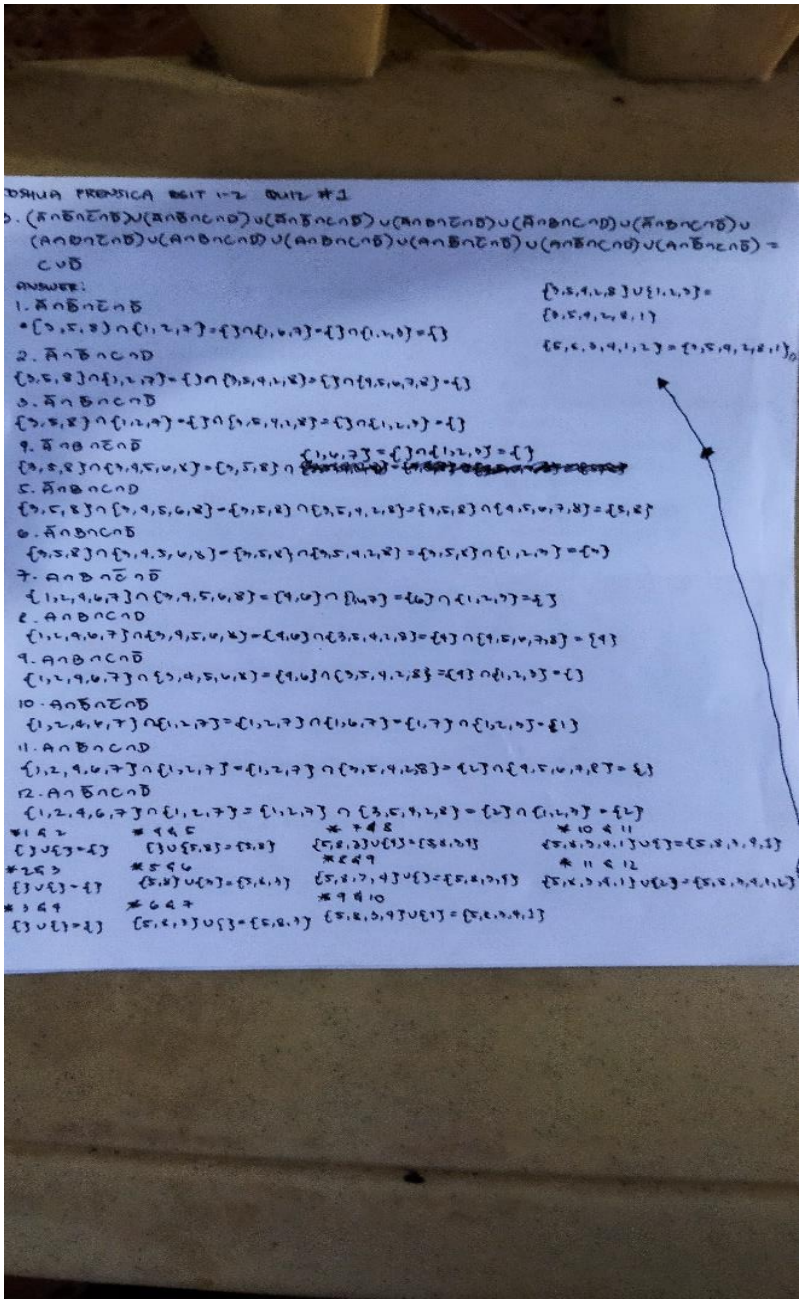
$= \{6,1,7,3,5,8,4\}$

* 6 & 7

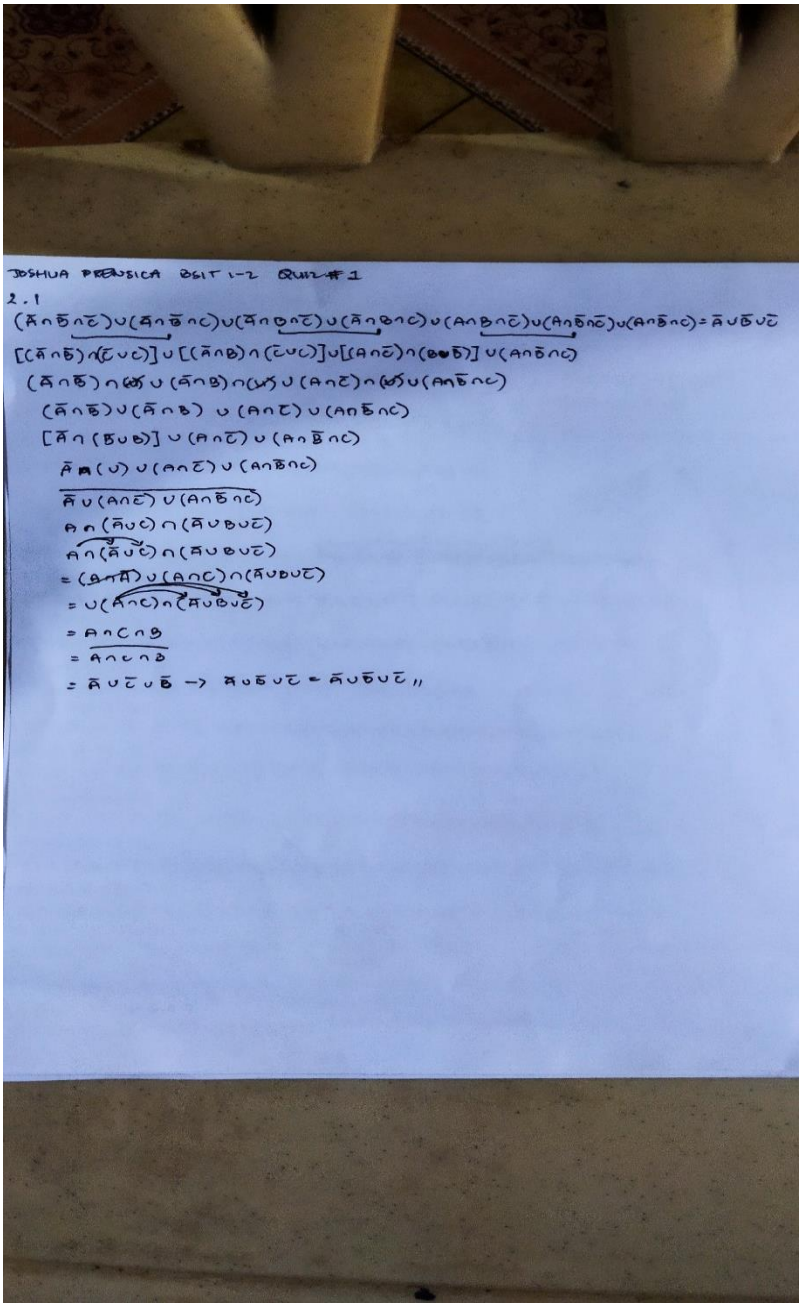
$\{6,1,7,3,5,8,4\} \cup \{2\}$

$= \{6,1,7,3,5,8,4,2\}$

PRENSICA, JOSHUA QUIZ 1 PART 4



PRENSICA, JOSHUA QUIZ 1 PART 5



JOSHUA PRENSICA BSIT 1-2 QUIZ #1

2.1

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

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

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

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

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

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

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

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

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

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

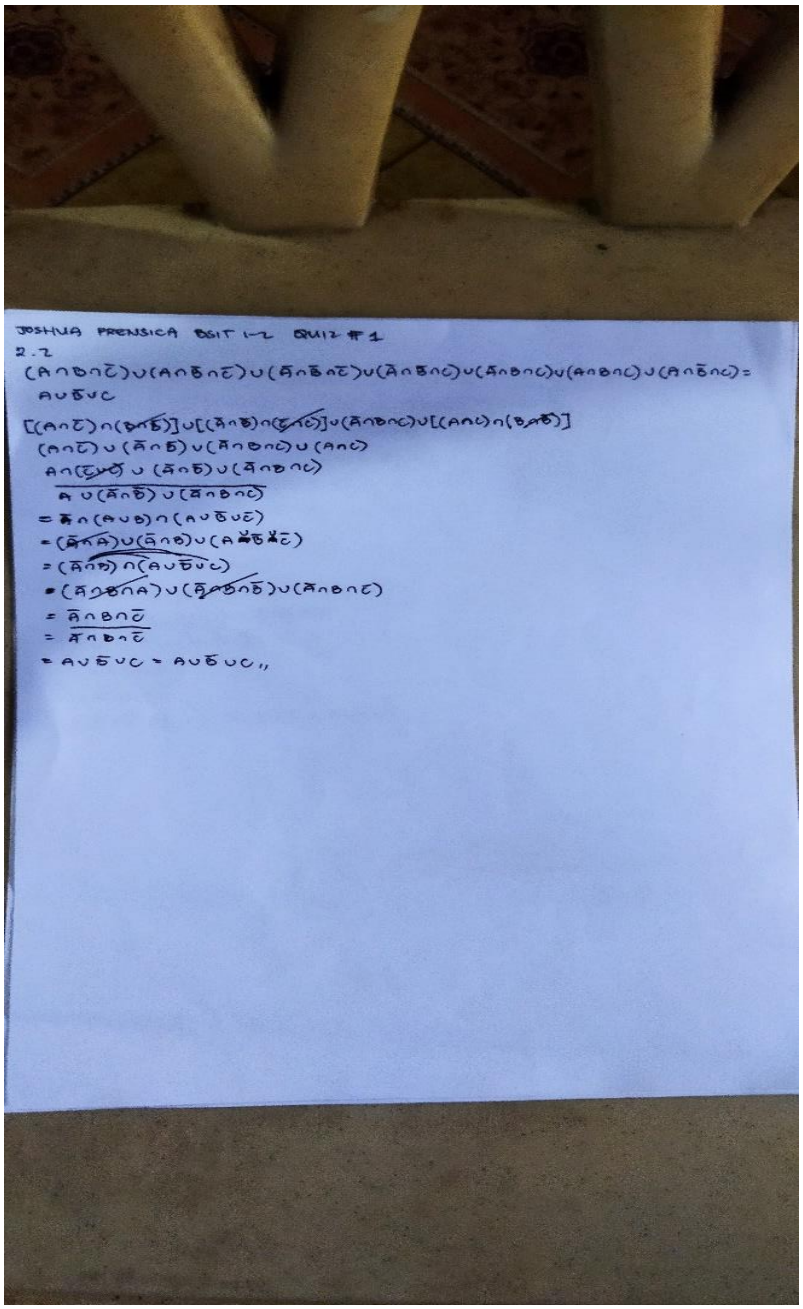
$= U \cup (A \cap C) \cap (\bar{A} \cup B \cup \bar{C})$

$= A \cap C \cap B$

$= \overline{A \cap C \cap B}$

$= \bar{A} \cup \bar{C} \cup \bar{B} \rightarrow A \cup B \cup C = \bar{A} \cup \bar{B} \cup \bar{C}$ //

PRENSICA, JOSHUA QUIZ 1 PART 6



PRENSICA, JOSHUA QUIZ 1 PART 7