

## Quiz Sample

Exercise 1 (10pt):

312 people were interviewed and asked which of the following cities they had visited: San Francisco, Los Angeles and New York.

- 55 said they had visited San Francisco.
- 143 said they had visited Los Angeles.
- 12 said they had visited San Francisco and Los Angeles but not New York.
- 14 said they had visited all three cities.
- The people that have visited only San Francisco are 86 less than the people who had only visited New York and 77 less than the people who had only visited Los Angeles.
- There were 36 people who had visited none of the three cities.
- Only 9 people visited both New York and San Francisco but not Los Angeles.

Construct a Venn diagram with the above information and find how many people who had visited:

- a) Only New York.
- b) San Francisco and only another city.
- c) At least two cities.

Exercise 2 (4pt):

Given the following:

Premise1: If I'm not tired I always go to some club on Saturday.

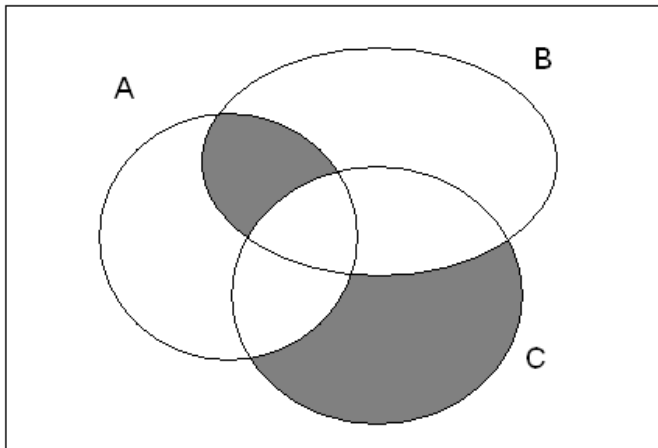
Premise2: If I go to a club I usually play billiards.

Conclusion: If this Saturday I played billiards I was not tired.

Use a Venn diagram to determine if the conclusion is correct.

Exercise 3 (6pt):

What does the colored part represent?



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

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

$(A \cup B) - C$

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