

# AN AXIOM SYSTEM - SYSTEM #1

It is impossible to discuss the nature of logical arguments until we have made some. Thus, without further ado, think of a club divided into committees according to these rules:

Rule 1 Each pair of committees has exactly one (that is, at least one but no more than one) member in common.

Rule 2 Each member is on exactly two (that is, at least two but no more than two) committees.

Rule 3 There are exactly four committees.

Using only these three rules, answer the following questions:

Exercise 1-1 How many club members are there?

Exercise 1-2 How many members are on each committee?

To help you answer these questions, draw sketches, using rectangles to represent committees, and letters or numbers to represent members.

Do not continue to the next page until you have tried as best you can to answer these questions.