## **Enumerative Combinatorics:**

It deals with the number of ways that certain pattern can be formed. Two examples of these are:

- 1. Counting combinations
- 2. Counting permutations

It is just like Systematic counting but it is not as easier as we think as it contains the systematic knowledge.

## 3 principles:

- 1. Addition
- 2. Multiplication
- 3. Inclusion and exclusion
- 4. Combination and permutation