## **TOPIC 2: Combinations**

<u>Combinations</u> – determines the number of possible arrangements in a set when the order of the arrangement is not given importance.

Example #1: Selecting a 6-member group from a class.

Explanation- the given statement is **combination** since in selecting member to form a group, there is no need of specific order.

Example #2: My mother and I went to market. We bought some vegetables like carrots, radish, string beans and cabbage but only three of the said vegetables can fit to our basket. How many ways can we select three kinds of vegetables out of four?

Explanation: In the given problem, it is considered as **combination** since there is no specific order of vegetable needed to fit in the basket, all they have to do is to select.

Example #3: Sandy wants to arrange her flower garden by simply moving each of the flowers one at a time.

Explanation: The statement is Permutation; there are the key words "one at a time" meaning to say the order of the flowers to be arranged are being considered.