## Tips and Tricks Permutation and Combination

## Tips and Tricks and Shortcuts for Permutation and Combination

- Use permutations if a problem calls for the number of arrangements of objects and different orders are to be counted.
- Use combinations if a problem calls for the number of ways of selecting objects and the order of selection is not to be counted.
- o Summary of formula to use

Order	Repetition	Formula
Permutation	Yes	n <sup>r</sup>
Permutation	No	np <sub>r</sub>
Combination	Yes	r + n – 1 <sub>Cr</sub>
Combination	No	n <sub>Cr</sub>