Factorial Notation

Notation:

For example, suppose you had three letters, A, B and C, and wanted to arrange them in a line to form a ‘word’, e.g. ACB or BAC.

* There are 3 choices for the first letter.
* There are then 2 choices left for the second letter.
* There is then only 1 choice left for the last letter.

There are therefore possible combinations.

**Your calculator can calculate a factorial using the button.**

For example, if you are a football team captain and need to choose 4 people from amongst 10 in your class, there are possible selections.

*(Note: the notation is preferable to )*

**Use the button on your calculator (your calculator input should display “10C4”)**

Examples:

Calculate the value of the following. You may use the factorial button, but not the nCr button.

1. b)
2. d)

e) f)

g) g)

Exercise 8B Page 162