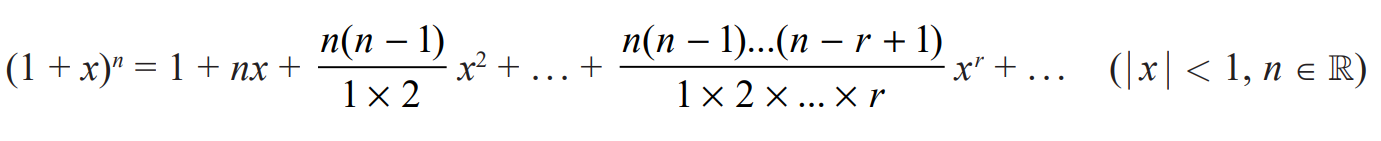
**4A (1+x)n**

How do we Calculate nCr?



1. Find: **without** using the nCr button on your calculator
2. Find: **without** using the nCr button on your calculator

When does this formula come unstuck?

1. Find up to the term
2. Find the Binomial expansion of: up to the term and state the values of x for which it is valid…
3. Find the Binomial expansion of: up to the term and state the values of x for which it is valid…
4. Find the Binomial expansion of: up to the term and by using x = 0.01, find an estimate for √2
5. Find the term in the series expansion of
6. State the range of values of for which the expansion is valid
7. In the expansion of the coefficient of is 90, and
8. Find the value of
9. Find the corresponding coefficient of the term

**4B (a+bx)n**

1. Find the first 4 terms in the Binomial expansion of:
2. Find the first 4 terms in the Binomial expansion of:

**4C Partial Fractions**

1. Find the expansion of: up to and including the term in x3