**Maclaurin Series**

The Maclaurin Series (expansion) is useful for approximating more complicated equations as polynomial equations.

The function and its derivatives must exist at .

General Form

Some standard Maclaurin Expansions…

|  |  |  |
| --- | --- | --- |
|  | Maclaurin Expansion | Valid for |
|  |  | All  |
|  |  | All  |
|  |  | All  |
|  |  |  |
|  |  |  |

Confirm these for yourself.

Find the first three non-zero terms of…

Find general term for each of these expansions

State the range of values for which each of these expansions is valid.

**From the Formula Book…**

