

Maths Rules

Year 1 Binomial Expansion

Section A

1. Find the binomial expansion of $(1 + x)^5$.
2. Find the binomial expansion of $(3 + x)^4$.
3. Find the binomial expansion of $(5 + 2x)^3$.
4. Find the binomial expansion of $\left(4 - \frac{1}{2}x\right)^6$.
5. Find the binomial expansion of $\left(\frac{3}{4}x + 1\right)^9$ up to and including the term in x^4 .

Section B

1. Find the binomial expansion of $\left(2x + \frac{1}{4x}\right)^3$.
2. Find the binomial expansion of $(x + x^3)^4$.
3. By writing $(1 + x + x^2)^3$ as $(1 + (x + x^2))^3$, or otherwise, find the binomial expansion of $(1 + (x + x^2))^3$.