

*Binomial Theorem*Learning objectives

In this unit we generalise algebraic expressions of the form $(a + b)^n$. After completing the unit you should be able to

- understand how to calculate expressions of the form $(a + b)^n$ for positive integers, n
- use binomial coefficients, including factorials, in the binomial expansion
- apply factorials to determine the number of arrangements of letters
- understand and use the Binomial Theorem for $(a + x)^n$.