

## High School Algebra Playlist: Using the Binomial Theorem

Aligns with [CCSS.Math.Content.HSA.APR.C.5](#): Know and apply the Binomial Theorem for the expansion of  $(x + y)^n$  in powers of  $x$  and  $y$  for a positive integer  $n$ , where  $x$  and  $y$  are any numbers, with coefficients determined for example by Pascal's Triangle.

### Related Standards

- [CCSS.Math.Content.HSA.APR.A.1](#): Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.

PREVIEW



## Objectives

In this module, you will learn and practice the following skills:

- understand the Binomial Theorem
- apply the Binomial Theorem

Let's get started!

## Key Terms

- The **binomial theorem** specifies the expansion of  $(a+b)^n$ , where each term is the product of a constant,  $a$  to a power, and  $b$  to a power.

## Connections

- <https://openstaxcollege.org/textbooks/algebra-and-trigonometry>; section 13.6, about page 1514

PREVIEW

