

Pre-Calculus 12 Binomial Theorem Continued

General Term

$$t_{k+1} = {}_n C_k x^{n-k} y^k$$

Ex. 1) Determine the 9th term of $(x - 2)^{10}$

Ex. 2) Given $(2x - y^3)^6$

a) determine the 4th term.

b) determine the last term.

c) the middle term

Ex. 2) In the expansion of $(2x - y^3)^{12}$, determine which term contains y^{15} .

Ex. 3) In the expansion of $\left(a^2 - \frac{1}{a}\right)^5$ which term, in simplified form, contains a ? Determine the value of this term.