



## Algebra 2 - The Binomial Theorem

The video covers the following exercises. Please print this sheet and work along!

Please expand:  $(x+3)^4$

Write out Pascal's Triangle:

*Let's first expand  $(x+y)^2$  to explore.*

Please use the Binomial Theorem Formula,  ${}_n C_k a^{n-k} b^k$  to directly determine the 2<sup>nd</sup> term of  $(x+3)^4$  above.

Please expand  $(2a-b)^5$ , then calculate the 4<sup>th</sup> term using the Binomial Theorem Formula.