

Name _____

Date _____

Ms. Schmidt

Pre-Calculus

Binomial Expansion

Kickoff

Find each of the following:

1) $(x + y)^0$

2) $(x + y)^1$

3) $(x + y)^2$

4) $(x + y)^3$

Pascal's Triangle



Find each of the following using Pascal's Triangle

5) $(x + y)^4$

6) $(m + 2n)^{15}$

Binomial Expansion: $nCr a^{n-r} b^r$ for $(p - q)^n$

What do those symbols mean?

nCr -

b^r -

a^{n-r} -

Example:

1) $(1 - a)^5$

2) $(2y^4 - 1)^6$

3) $(2x + 3)^5$

4) $(2x^3 - y)^5$

5) $(2m - 3n)^4$

6) $(m^3 + 2n)^6$

7) $(a^3 - b^2)^7$

8) $(3x^2 - 2)^5$

9) $(4n^3 - 5)^4$

10) $(3u^2 - y^3)^3$

11) $(5x^2 - 4)^4$