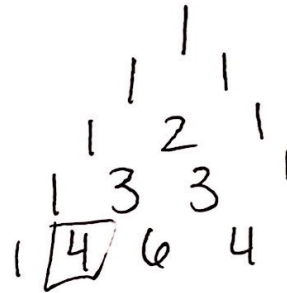


**LT #5: Binomial Expansion**

1. Find the second term in the expansion of  $(2x - 2y)^4$ . (2 Points)

$4(2x)^3(-2y)^1$  *3+1=4 one less than term #*

$4(8x^3)(-2y) = \boxed{-64x^3y}$



2. Expand  $(3x - y)^4$  (3 Points)

$81x^4$      $4(27x^3)(-y)$      $6(9x^2)y^2$

$1(3x)^4(-y)^0 + 4(3x)^3(-y)^1 + 6(3x)^2(-y)^2 + 4(3x)^1(-y)^3 + 1(3x)^0(-y)^4$

$81x^4 - 108x^3y + 54x^2y^2 - 12xy^3 + y^4$