

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Multiplying Polynomials

Multiplying: Distribute Every Term

1.  $2x(-2x - 3)$

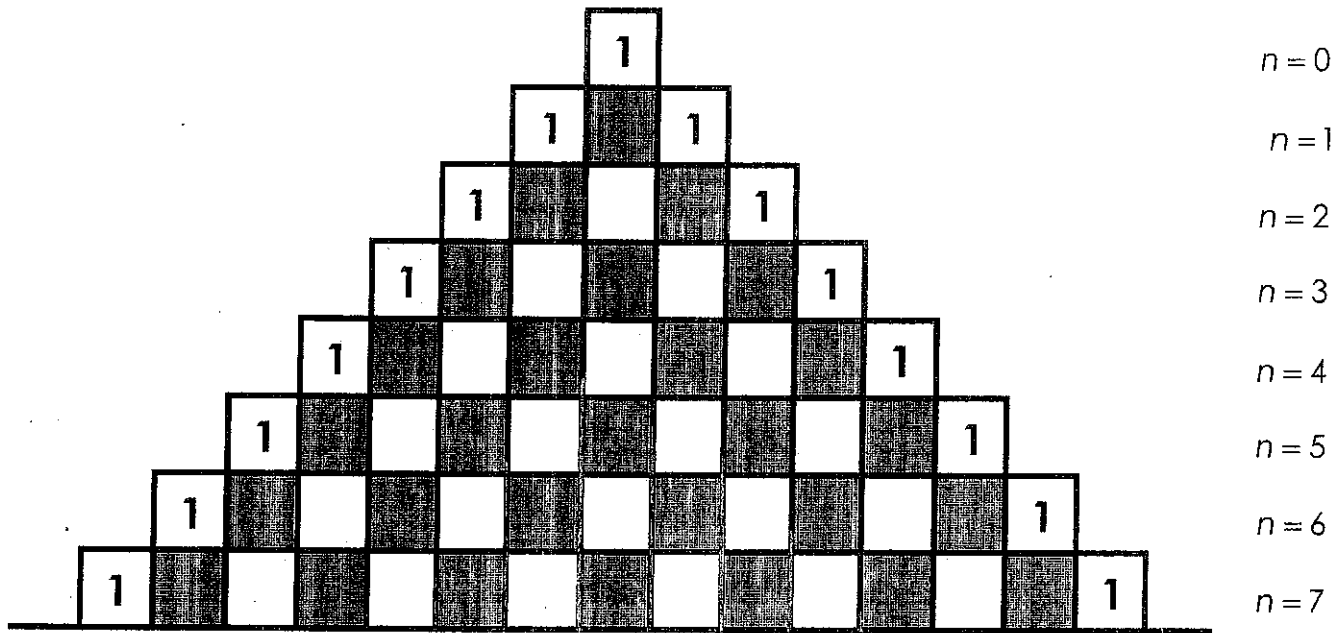
2.  $(3m - 1)(8m + 7)$

3.  $(2a - 1)(8a - 5)$

4.  $(4n + 1)(2n + 6)$

### Binomial Theorem

Pascal's Triangle



$(x + y)^0 = 1$

$(x + y)^1 = 1x + 1y$

$(x + y)^2 = 1x^2 + 2xy + 1y^2$

$(x + y)^3 = 1x^3 + 3x^2y + 3xy^2 + 1y^3$

$(x + y)^4 = \underline{\hspace{10em}}$

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Use the Binomial Theorem and Pascal's Triangle to write each binomial expansion.

5.  $(x+3)^5$

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6.  $(x-2)^4$

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7.  $(x+5)^4$

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8.  $(2x+1)^3$

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