Pascal's triangle pattern for binomial expansion

$$(a+b)^0 = 1$$

$$(a+b)^1 = 1a + 1b$$

$$(a+b)^2 = 1a^2 + 2ab + 1b^2$$

$$(a+b)^3 = 1a^3 + 3a^2b + 3ab^2 + 1b^3$$

$$(a+b)^4 = 1a^4 + 4a^3b + 6a^2b^2 + 4ab^3 + 1b^4$$

$$(a+b)^5 = 1a^5 + 5a^4b + 10a^3b^2 + 10a^2b^3 + 5ab^4 + 1b^5$$

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$$(a+b)^0 = 1$$
$$(a+b)^1 = 1a+1b$$
$$(a+b)^2 = 1a^2+2ab+1b^2$$
$$(a+b)^3 = 1a^3+3a^2b+3ab^2+1b^3$$

Number of terms compared with exponent: Always one more

Degree of terms compared with exponent: All same degree as exponent

Exponent on "a" starts at exponent on binomial and goes down one each term, exponent on "b" starts at zero and goes up each term.

Coefficient of first term is always: 1

Coefficient of other terms is always coefficient of previous term multiplied by exponent on "*a*" for previous term, divided by the number of the previous term.