Sequences and Series

$$U_n = ar^{(n-1)}$$

$$S_n = \frac{a(1-r^n)}{1-r}$$

$$S_\infty = \frac{a}{1-r}$$

$$a = the\ first\ number$$

$$r = the\ common\ ratio$$

The Binomial Expansion

Use Pascal's triangle or the nCr button

$$(a+b)^4$$

$$1a^4 + 4a^3 b + 6a^2 b^2 + 4ab^3 + 1b^4$$