

Binomio de Newton

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```
{r setup, include=FALSE} knitr::opts_chunk$set(echo = TRUE)
```

Producto Notable

La fórmula del producto notable es:

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

Función con R

```
{r Binomio de Newton} binomioNewton2 = function(a,b){  a^2+2*a*b+b^2 } binomioNewton2(1,2)
# Binomio de Newton
```

$$(a + b)^n = \sum_{k=0}^n \binom{n}{k} \cdot a^{n-k} \cdot b^k = \binom{n}{0} * a^n * b^0 + \dots * \binom{n}{n} * a^0 * b^n$$

Función con R

```
binomioNewton = function(a,b,n){
  cumsum(choose(n,(0:n))*a^{n-(0:n)}*b^{(0:n)})[n+1]
}
binomioNewton(2,1,2)
```