

# CamaradaNewton

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22/6/2022

## Producto notable

Su fórmula es:

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

```
binomio2 <- function(a,b){  
  a^2+(2*a*b)+b^2  
}  
binomio2(1,2)
```

```
## [1] 9
```

## Binomio de newton

Su fórmula es:

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

```
binNew <- function(a,b,n){  
  cumsum(choose(n,(0:n))*a^(n-(0:n))*b^(0:n))  
}  
binNew(2,1,2)
```

```
## [1] 4 8 9
```