

Binomio de Newton

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Producto Notable

la formula del producto notable es

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

Funcion con R

```
binomioNewton2 <- function(a,b){  
  a^2 + 2*a*b + b^2  
}  
binomioNewton2(1,2)
```

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

```
binomioNewton2(2,1)
```

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

Binomio de Newton

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

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

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