

Binomio de Newton

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Producto Notable

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

Funcion con R

```
binomiodenewton2 = function(a,b) {  
  a^2 + 2*a*b + b^2  
}
```

```
binomiodenewton2(1,2)
```

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

Binomio de Newton

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

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

```
## [1] 1 5 9
```