

Binomio De Newton

Alexis Frías Domínguez

6/8/2020

Producto notable

La formula del producto notable es:

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

Función con R

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

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

Binomio de Newton

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

Función con R

```
binomioNewton = function(a,b,n){  
  cumsum(choose(n,(0:n))*a^{n-(0:n)}*b^{(0:n)})[n+1]  
}  
binomioNewton(2,1,3)
```

```
## [1] 27
```