Función algoritmo Sum(n)

```
Cont ← 2^n
For j ← 1 to n do
    s ← cont
    While s>1 do
        s ← s/2
    end while
end For
return s
```

$O(Fun) = O(n^2)$

While

$S_0 = 2^n$

$S_1 = \frac{S_0}{2} = \frac{2^n}{2^2}$

$S_2 = \frac{S_1}{2} = \frac{2^n}{2^3}$

$\therefore S_K = \frac{S_{K-1}}{2^K} = \frac{2^n}{2^K}$

Despejar

$\frac{2^n}{2^K} \leq 1 \rightarrow 2^n \leq 2^K = n = K$ //

Fun = $3n^2$ While = $3n$ For = n

total $3n^2 + 2$ //