Ejercicio 3b TP 1

```
t = 0
Para i desde 1 hasta n hacer
        Para j desde (2n) hasta i hacer
                Muestra ( A( i ) , A ( j ) )
                t = t + j
        FinPara
        t = t + i
FinPara
```

$$T(n) = 1 + \sum_{i=1}^{n}[3 + \sum_{j=i}^{2n}(3+3+2) + 3 + 2] + 3$$

$$T(n) = 4 + \sum_{i=1}^{n}(8 + \sum_{j=i}^{2n} 8)$$

$$T(n) = 4 + 8\,n + \sum_{i=1}^{n}\sum_{j=1}^{2n} 8$$

$$T(n) = 4 + 8\,n + \sum_{i=1}^{n}(2n - i + 1) * 8$$

$$T(n) = 4 + 8\,n + \sum_{i=1}^{n}(16\,n - 8\,i + 8)$$

$$T(n) = 4 + 8\,n + \sum_{i=1}^{n} 16\,n - \sum_{i=1}^{n} 8\,i + \sum_{i=1}^{n} 8$$

$$T(n) = 4 + 8\,n + 16\,n^2 - 8\sum_{i=1}^{n} i + 8\,n$$

$$T(n) = 4 + 16\,n + 16\,n^2 - 8\,(n\,\frac{n+1}{2})$$

$$T(n) = 4 + 16\,n + 16\,n^2 - 4\,(n^2 + n)$$

$$T(n) = 4 + 16\,n + 16\,n^2 - 4\,n^2 - 4\,n$$

$$\underline{\boldsymbol{T(n) = 12\,n^2 + 12\,n + 4}}$$