

$$+ (n-i) + i \cdot n - \sum_{j=1}^{i-1} j =$$

$$= \tau \left( n-i \right) + i.n - \left( i-i \right) \cdot \left( \left( i-i \right) + i \right)$$

caso base

$$N-1 = 1$$

$$\gamma - 1 = i$$

$$= T(1) + (N-1) \cdot N - ((N-1)-1) \cdot ((N-1)-1) + 1) =$$

$$= T(1) + (N-1) \cdot N - N^{2} - 3N + 2^{2} =$$

$$= S + N_3 - N - \left(\frac{S}{N_5 - 3N + 5_5}\right) =$$

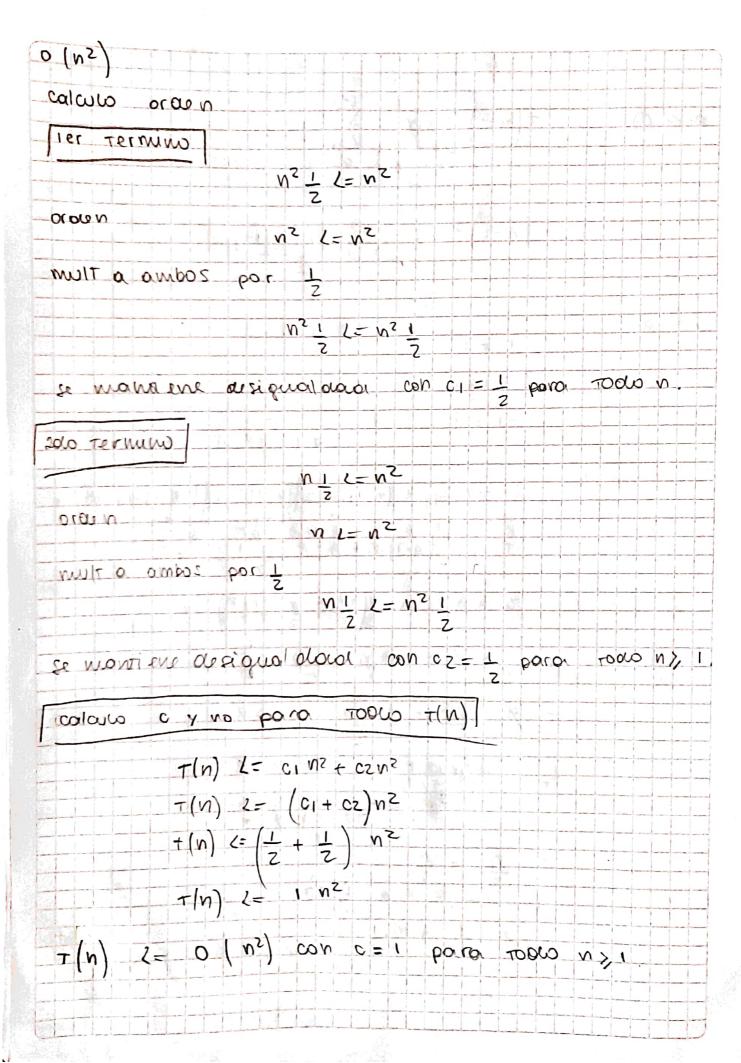
$$= 2 + n^2 - n - n^2 + 3n - z^2 =$$

$$= \frac{1}{12} + \frac{1}{2} + \frac$$

$$= N_5 + N =$$

$$=\frac{N^2}{2}+\frac{N}{2}=$$

$$= \begin{bmatrix} \mathbf{n}^2 \cdot \mathbf{I} & + \mathbf{n} \cdot \mathbf{I} \\ \mathbf{Z} & \mathbf{Z} \end{bmatrix}$$



b) 
$$\tau(n) = \begin{cases} 2 & n=1 \\ T(n-1) + \frac{1}{2} & n \frac{1}{2} \end{cases}$$

Supp mixing que  $n \frac{1}{2} = \frac{1}{2}$ 

paso ①  $T(n-1) + \frac{1}{2} = \frac{1}{2} + \frac{1}{2} = \frac{1}{2}$ 
 $= \tau(n-2) + \frac{1}{2} + \frac{1}{2} = \frac{1}{2}$ 
 $= \tau(n-2) + \frac{2n-1}{2} = \frac{1}{2}$ 
 $= \tau(n-3) + \frac{3n-3}{2} = \frac{1}{2}$ 
 $= \tau(n-4) + \frac{1}{2} = \frac{1}{2}$ 

poso ②  $T(n-4) + \frac{1}{2} = \frac{1}{2}$ 
 $= \frac{1}{2} = \frac{1}{2}$ 
 $= \frac{1}{2} = \frac{1}{2}$ 

- 7	$(n-i)$ + $in$ - $\frac{1}{2}$ · $((i-1),((i-1)+1))$ = $\frac{1}{2}$ · $\frac{1}{2}$ · $\frac{1}{2}$
	$t(n-i) + in - (i^2-i) =$
	$\pm (n-i)^{\dagger} \stackrel{in}{=} + \stackrel{i}{=} - i^2$
2200 6026	$\gamma_{-i} = 1$
	M = 1 - 1
i ogalgensar	$+(N-(N-1)) + (N-1)N + (N-1) - (N-1)^{2} =$
=	$\frac{7(1) + N^{2} - N}{2} + (N-1) - (N^{2} - 2N + 1) - \frac{1}{2}$ $\frac{1}{2} + N^{2} - N + (N-1) - (N^{2} - 2N + 1) - \frac{1}{2}$
	$8 + 2/n^2 - 3/n + n - 1 - 1/n^2 + 3/n - 1$
	$\frac{3}{2} + n^2 + n + n + n = T(n)$

$$\begin{array}{l} \sigma\left(n^{2}\right) \\ \tau\left(n\right) <= 0 \left(n^{2}\right) \quad con \quad c=2 \quad para \ rooto \quad n>, 3. \end{array}$$

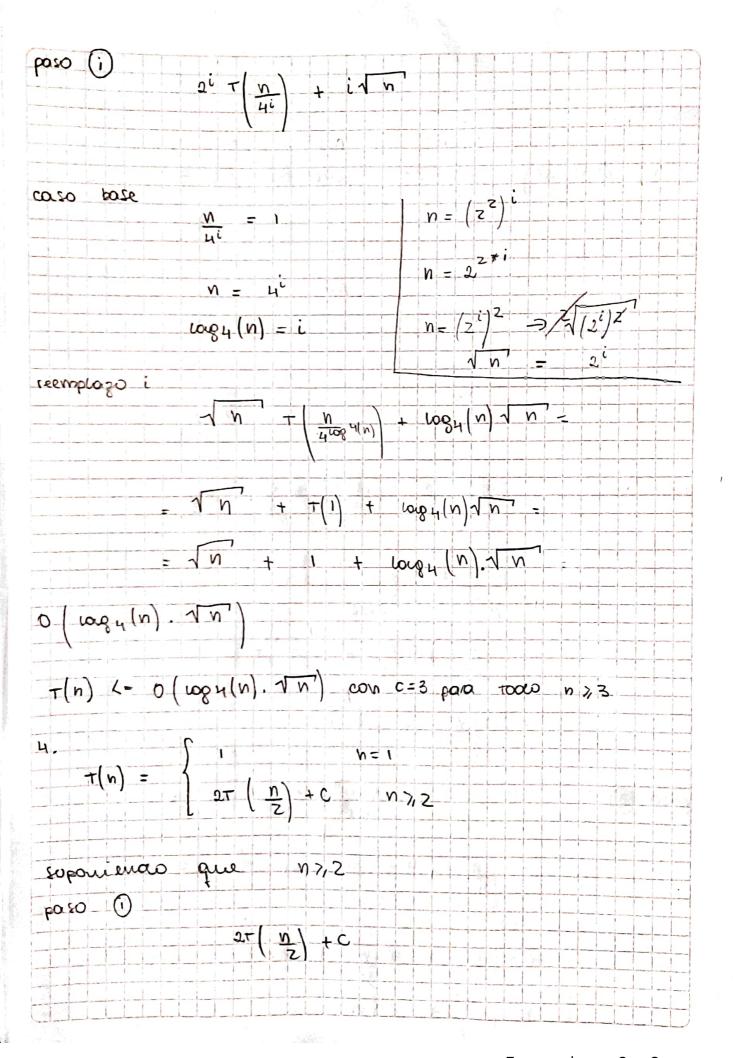
$$\begin{array}{l} 3. \quad \tau(n) = \begin{cases} 1 & n=1 \\ 2\tau\left(\frac{n}{N}\right) + \sqrt{n} & n>2 \end{cases}$$

$$\begin{array}{l} sopolule rooto \quad que \quad n>2 \\ 2\tau\left(\frac{M}{N}\right) + \sqrt{n} & n>2 \end{cases}$$

$$\begin{array}{l} paro \quad 0 \\ 2\tau\left(\frac{M}{N}\right) + \sqrt{n} & n>1 \end{cases}$$

$$\begin{array}{l} -4\tau\left(\frac{M}{N^{2}}\right) + 2\sqrt{n} & n>1 \end{cases}$$

$$\begin{array}{l} -4\tau\left(\frac{M}{N^{2}}\right) + 2\sqrt$$



paso (2)	$2\left[2\left[2\left(\frac{N}{z^{2}}\right)+c\right]+c$
	$= 4T \left( \frac{U}{z^2} \right) + 2C + C =$ $= 4T \left( \frac{U}{z^2} \right) + 3C$
paco	$2^{i} T\left(\frac{n}{2^{i}}\right) + \left(2^{i}-1\right) \cdot C$
caco bace	$\frac{\mathbf{y}}{\mathbf{z}^{i}} = 1$
	$N = 2^{i}$ $ag_{2}(in) = i$
reemplago i	
	$N \cdot T \left( \frac{N}{2} \cos \rho_2(n) \right) + \left( N - 1 \right) \cdot C =$
	$N \cdot T(i) + Nc - Ci =$ $N \cdot T(i) + Nc - Ci = T(i)$
0 (n) =	V + NC - CI = L(N)
T(n) L= 0 (n)	) con c = 20,+1 para rodus n>,1,

