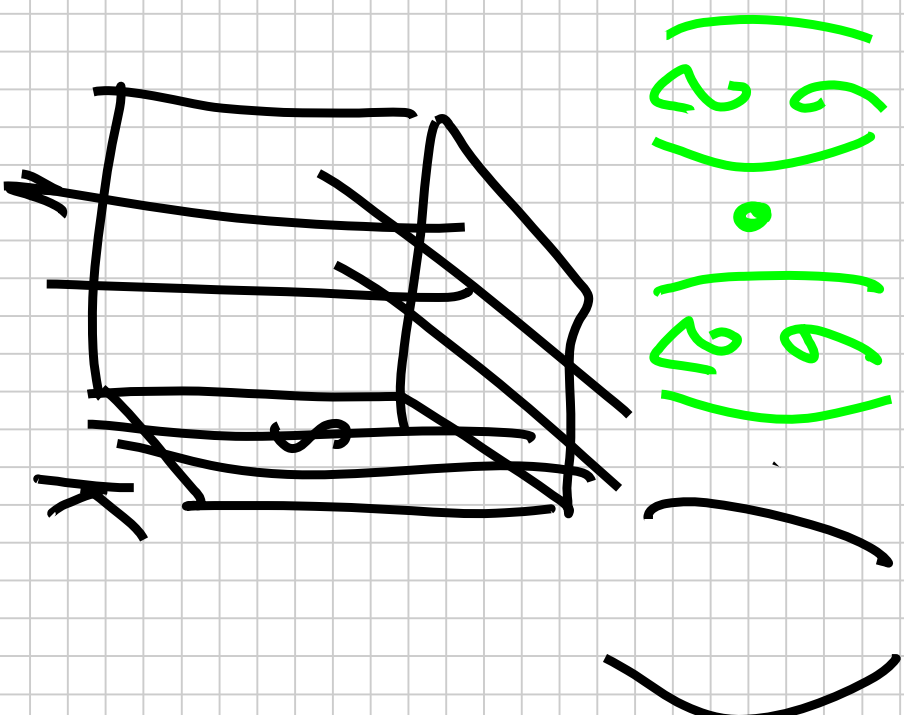
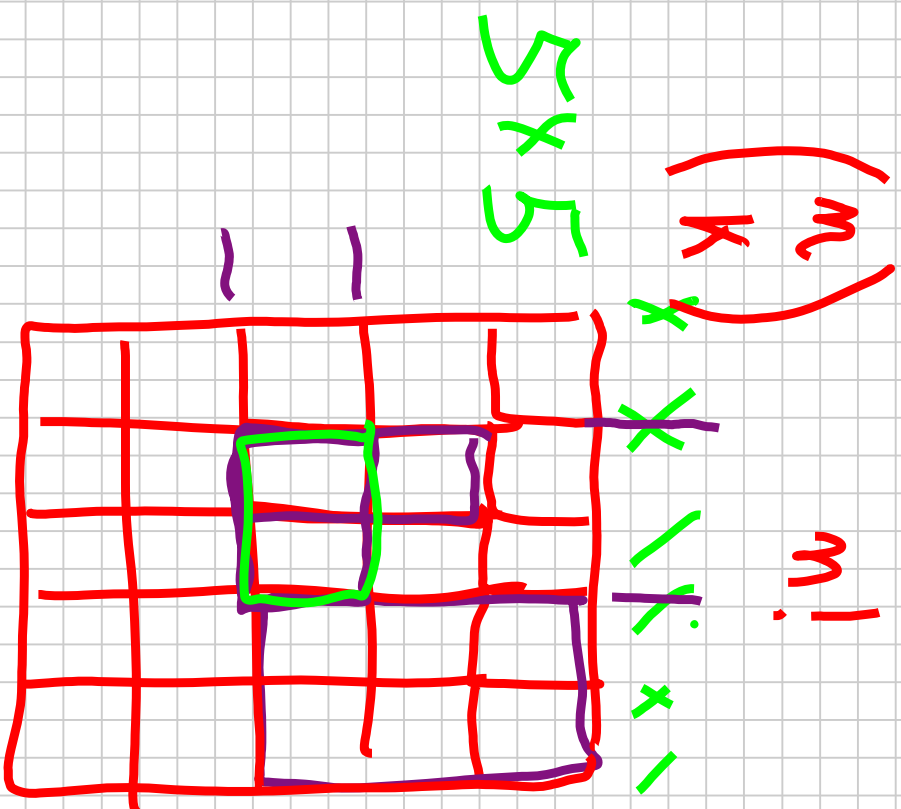
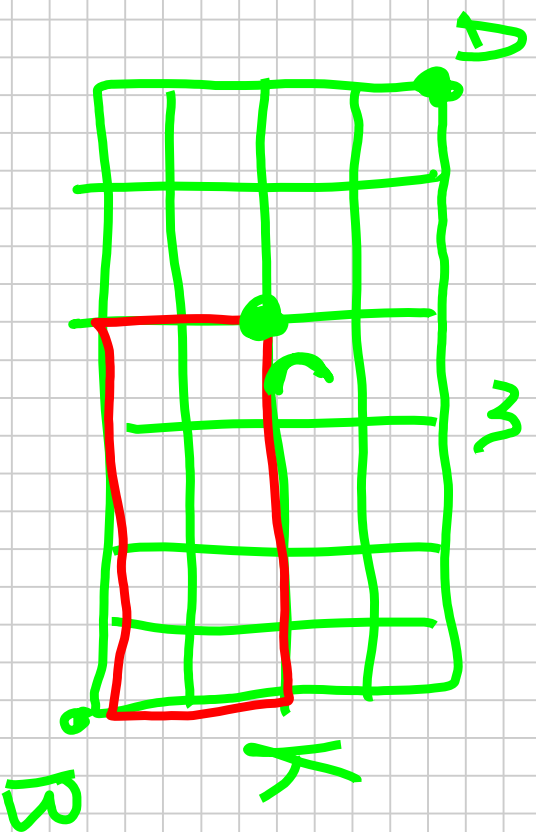


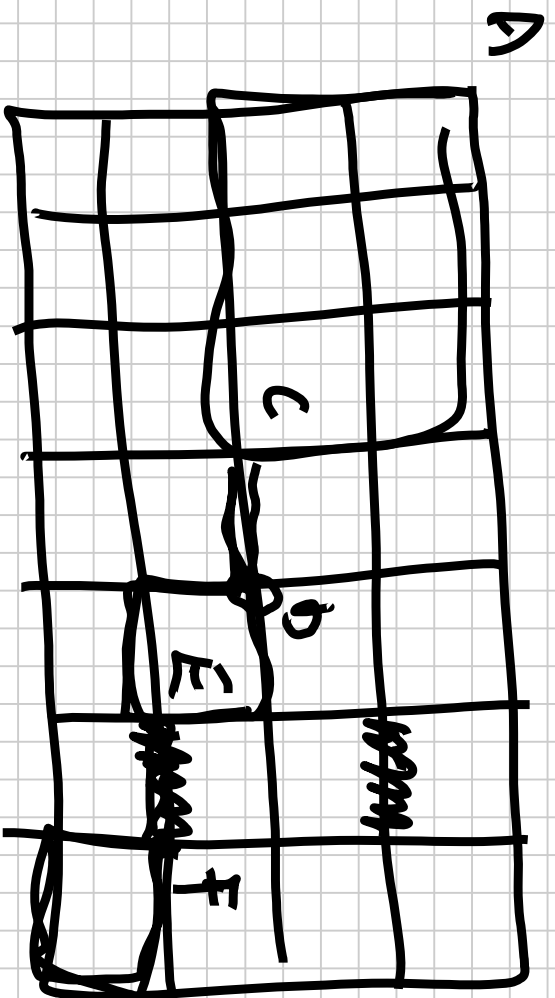




$$\binom{n+k}{k}$$

$$\binom{n}{k} = \binom{n}{n-k}$$

$$\binom{4}{2} = \binom{4}{2}$$

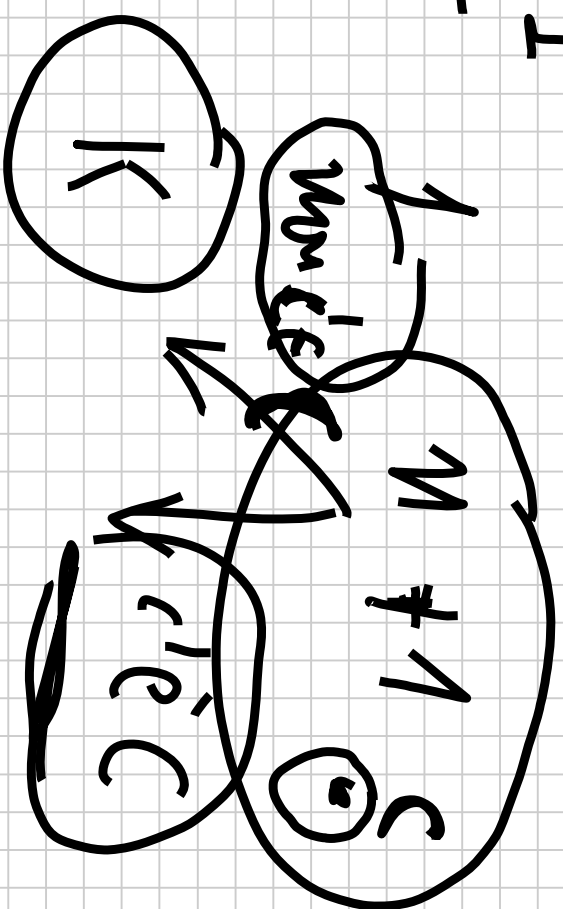


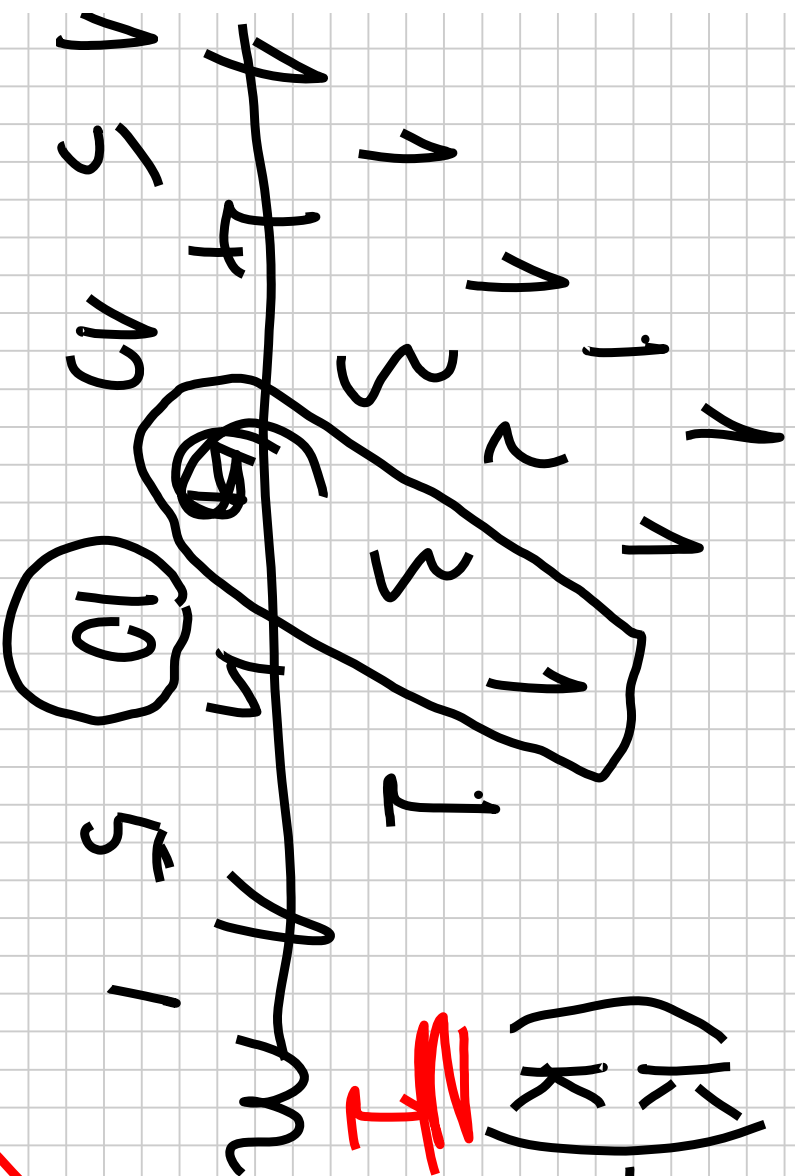
B

$$\frac{\binom{11}{4} - \binom{5}{2} \cdot 1 \cdot \binom{5}{2}}{\quad}$$

$$I_{AG} - I_{non(15)} + I_{non EF + (5)}$$

$$1 - \frac{1}{K} = \frac{K-1}{K}$$

[illegible]



$$\binom{k}{k} + \binom{k+1}{k} + \binom{k+2}{k} + \dots + \binom{n}{k} = \binom{n+1}{k+1}$$

$$m \quad \binom{n}{k} \quad \binom{n-1}{k} \quad \binom{n-2}{k} \quad \dots \quad \binom{1}{k}$$

11 xmin with 5

$$\begin{array}{r}
 \begin{array}{c} (1) \\ \hline 51 \\ 40 \end{array} + \begin{array}{c} (9) \\ (3) \end{array} \quad \begin{array}{c} (2) \\ \hline 9 \\ 4 \end{array} \quad \begin{array}{c} A \text{ x } B \\ (9) \\ (5) \end{array} \\
 \begin{array}{c} (9) \\ (5) \end{array} \quad \begin{array}{c} 2 \\ (4) \end{array} + \begin{array}{c} (9) \\ (5) \end{array} \\
 \hline
 \begin{array}{c} (11) \\ (5) \end{array} - \begin{array}{c} (9) \\ (3) \end{array}
 \end{array}$$

14

6 members

[DOOZ]

3 persons present

$N=4$ $K=3$

[A B C D E F]

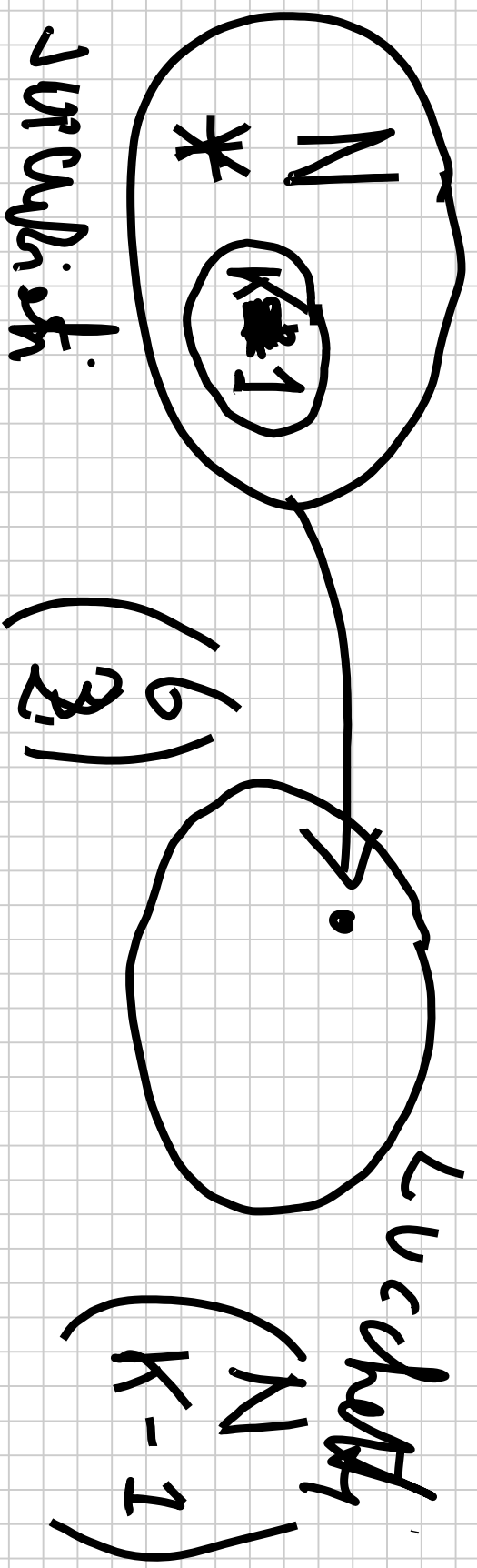
(A B C - A D E - B D F - C E F)

Enough tickets

Enough chairs

$N=6$

$K=3$

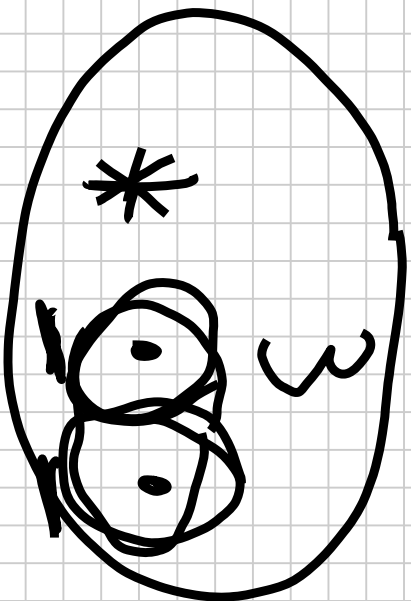


$$(N-1) \rightarrow (5)$$

$$(K-1)$$

$$N=3 \quad K=2$$

$$\overbrace{ABC} \quad \overbrace{A \cancel{B} \cancel{C} - B \cancel{A} - AC}$$



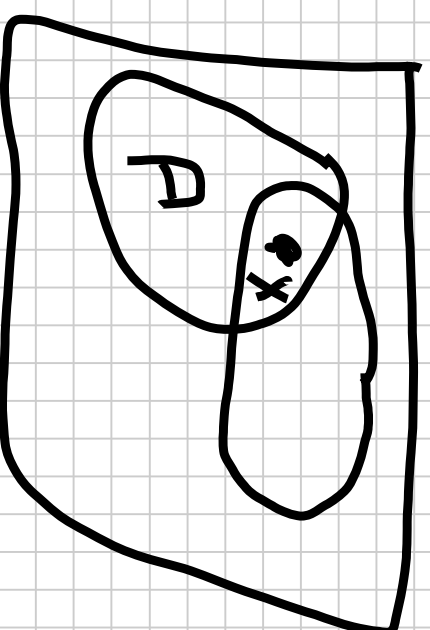
$$\binom{2}{1}$$

$$= 2$$

~~AB-BC~~ AC

~~uv~~

uv



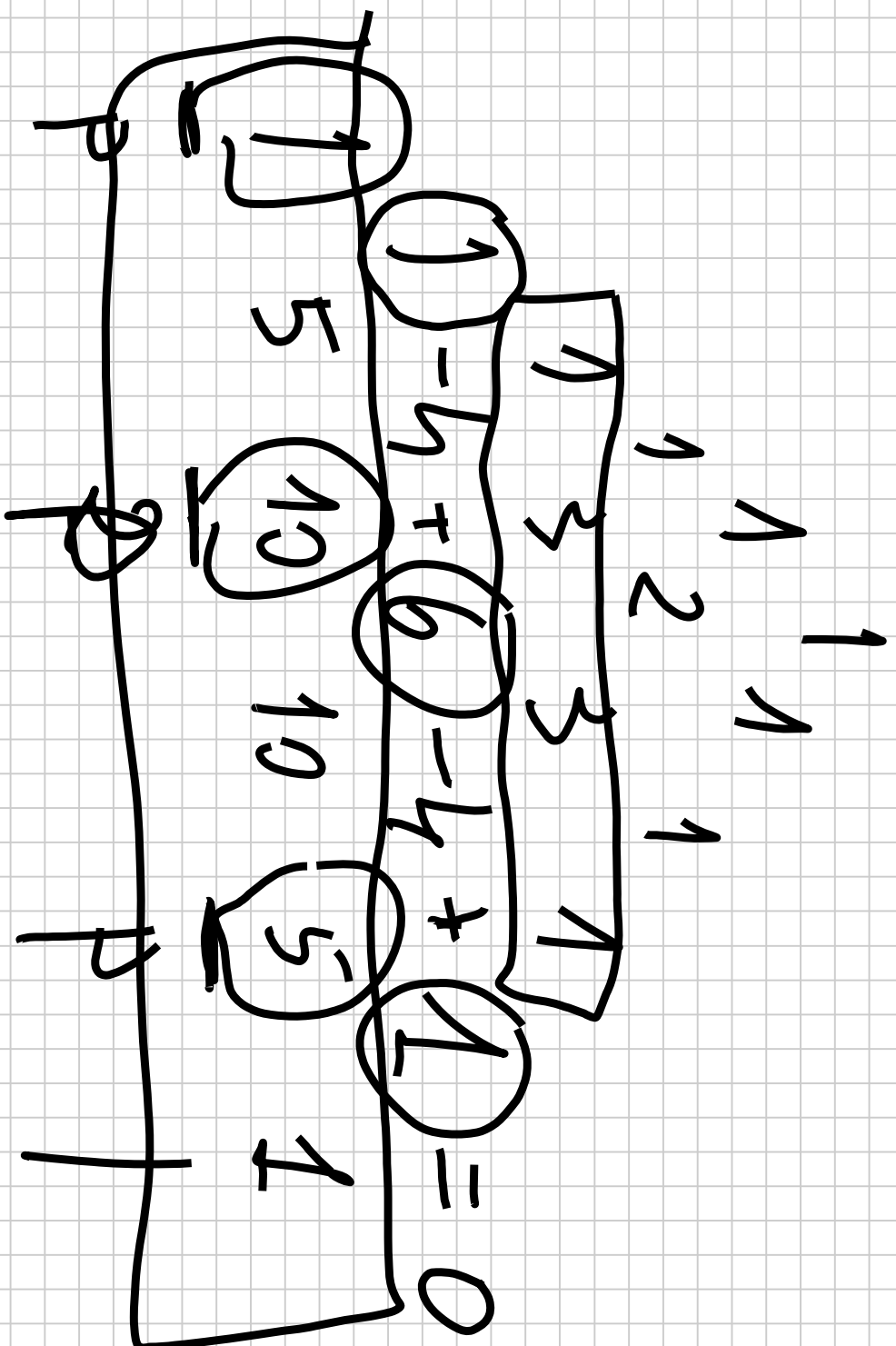
A

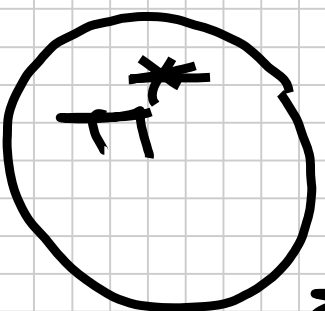
A

{1, 2, ..., n}

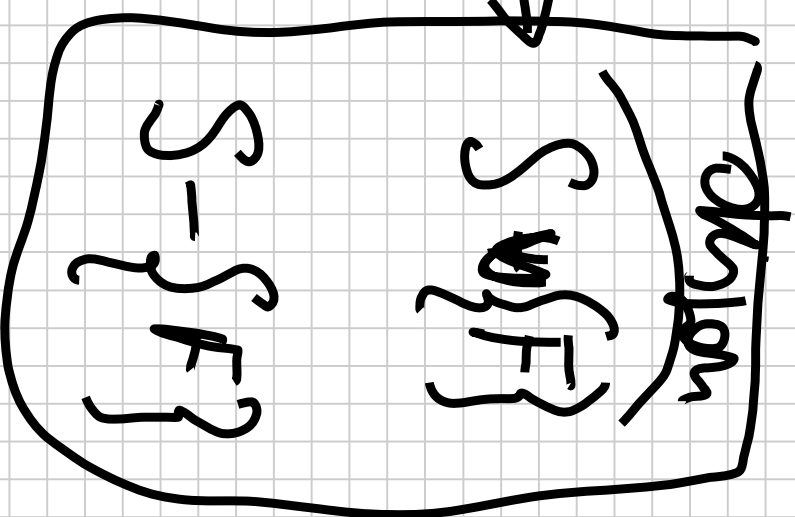
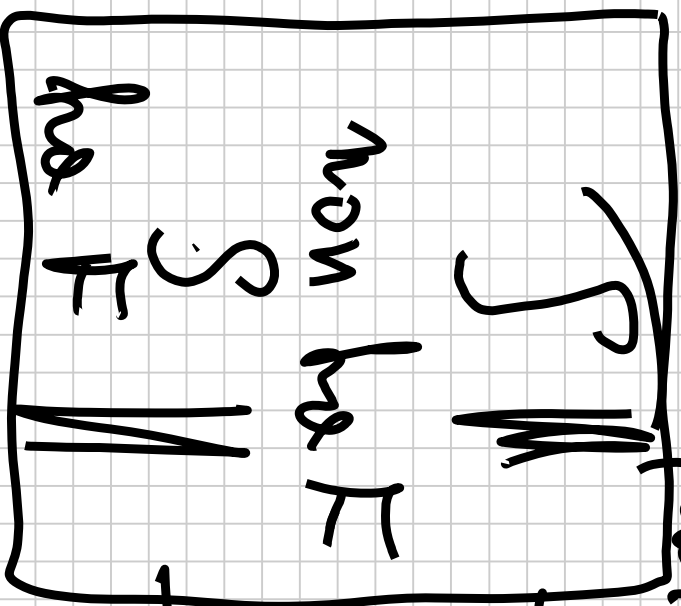
$2^{\frac{n}{2}} = 2^{\frac{n}{2}}$

$\max \frac{2^n}{2}$



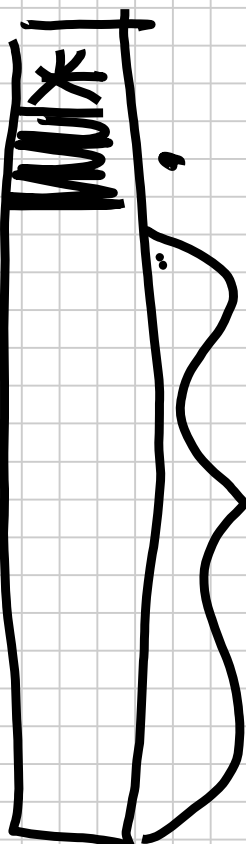
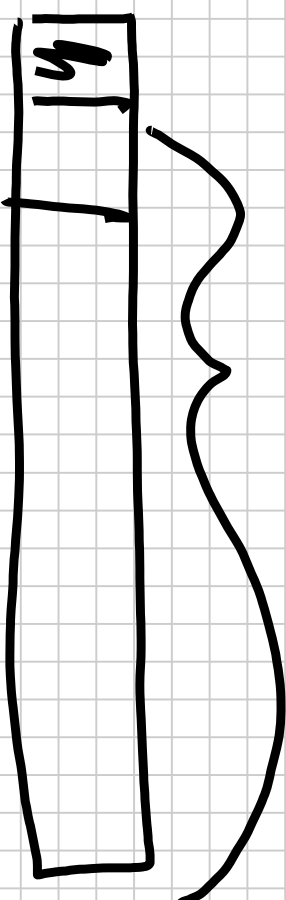
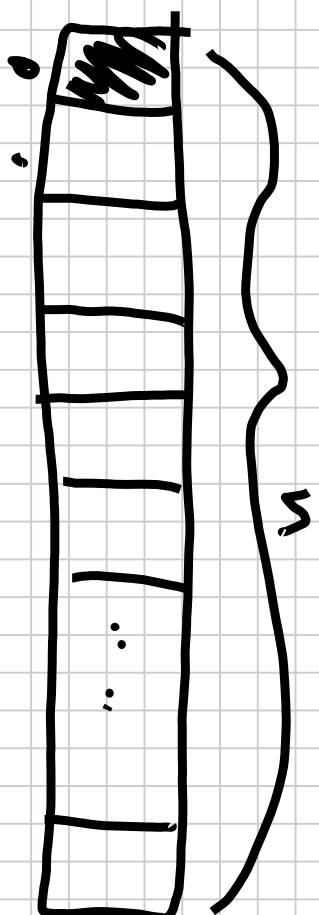
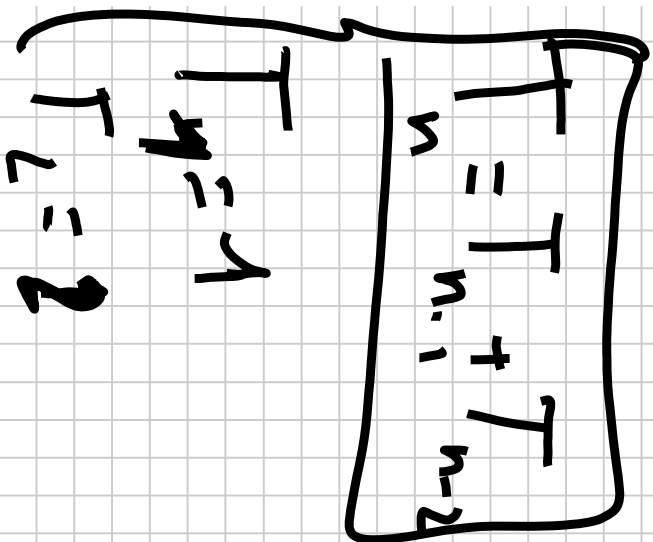


N elements



T_n

T_{16}



$T_1 = T_{n+1}$

T_{n-1}

T_{n-2}

$$\boxed{T_{n+1}} = T_n + T_{n-1} + \dots + T_1$$

$$T_{n+2} = T_{n+1} + \underbrace{T_n + \dots + T_1}_{T_{n+1}}$$

$$T_{n+2} = 2T_{n+1}$$

$$\begin{aligned}
 & \left[\begin{array}{c} T_{n+1} \\ T_n \\ \vdots \\ T_1 \end{array} \right] = \left[\begin{array}{c} T_{n-1} \\ T_{n-2} \\ \vdots \\ T_1 \end{array} \right] \\
 & T_{n+2} = \left[\begin{array}{c} T_n \\ \vdots \\ T_1 \end{array} \right]
 \end{aligned}$$

