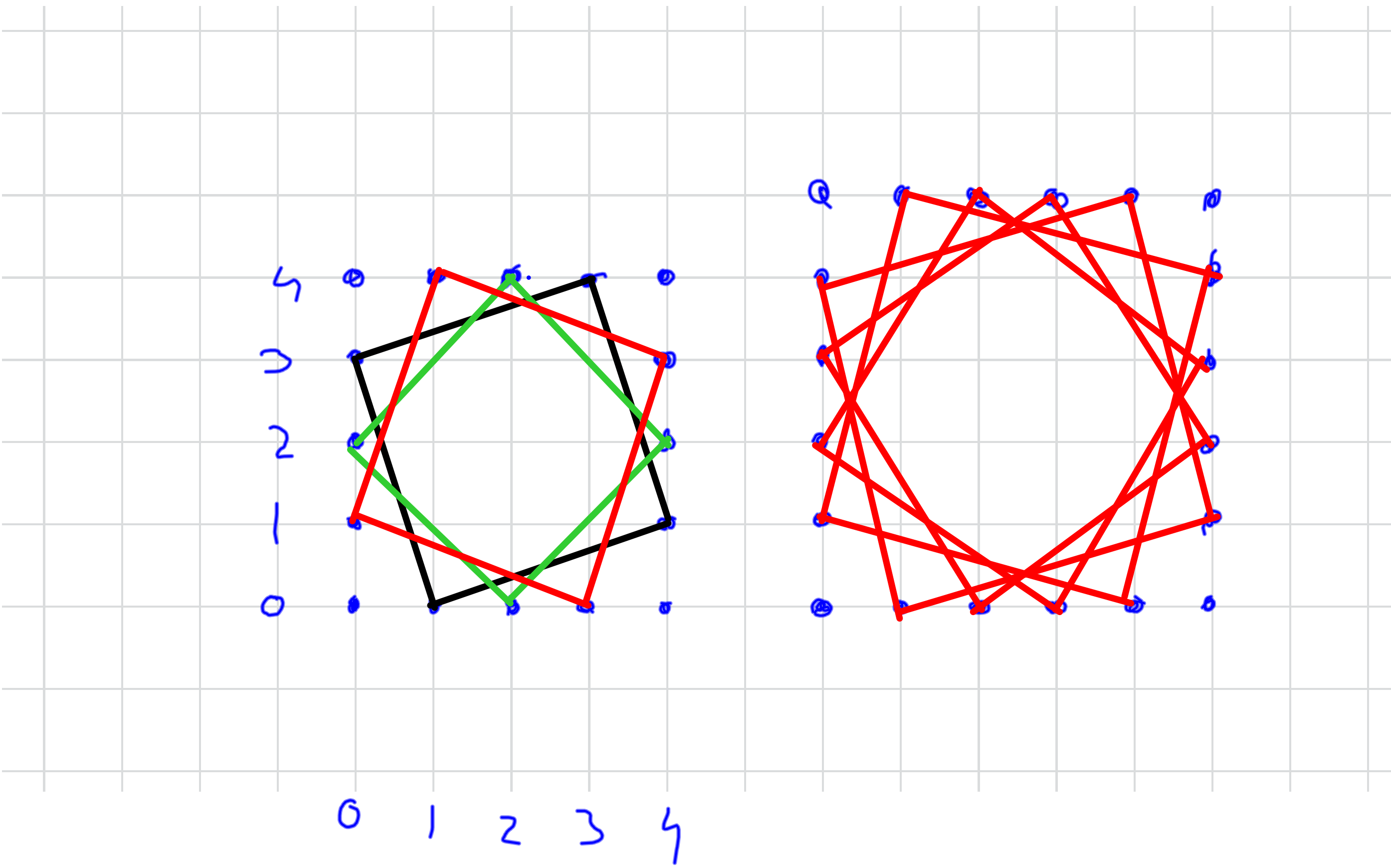
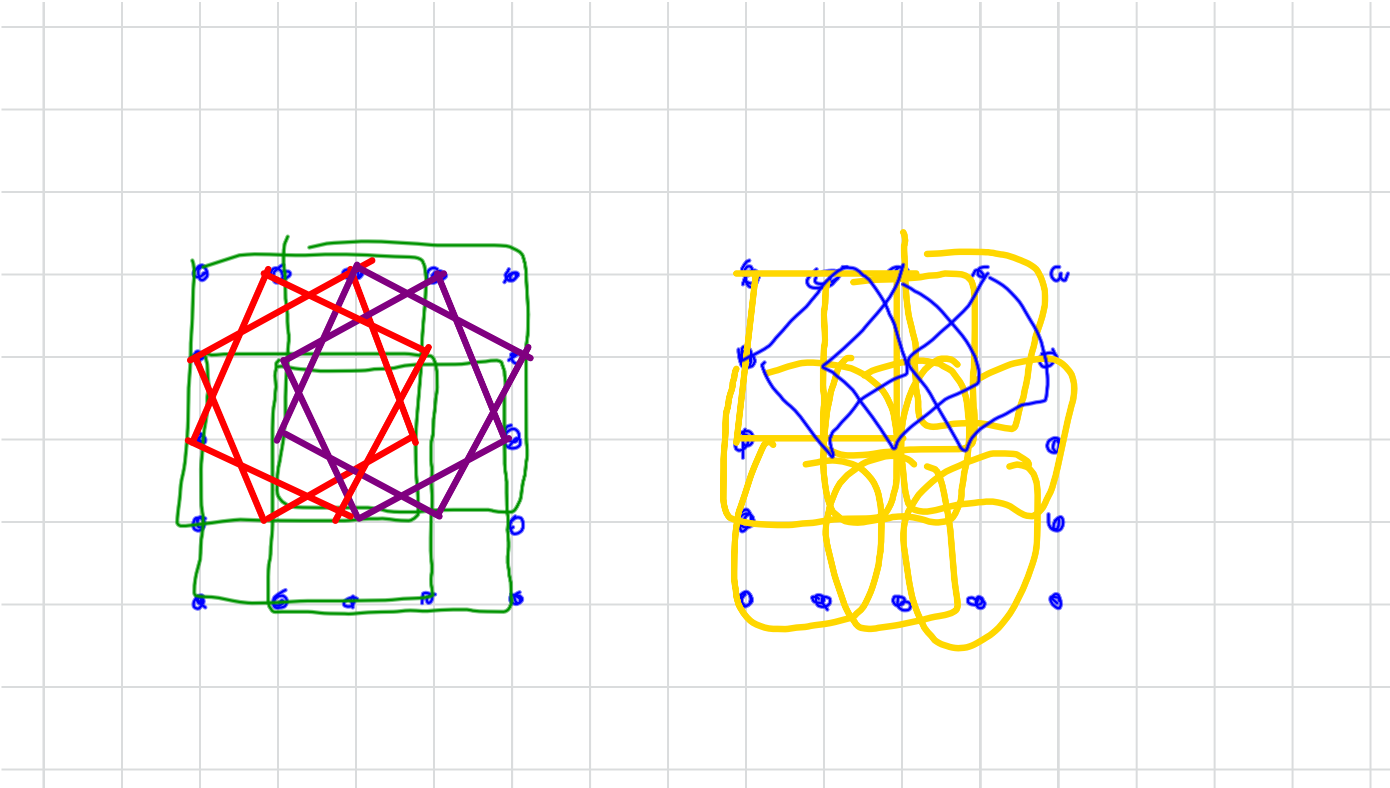
$n=4$





obliq $3 + 4 \times 2 + 9 \times 1$

$$n=5 \quad 1^2\cdot 4+2^2\cdot 3+3^2\cdot 2+4^2\cdot 1$$

general:

$$1^2\cdot(n-1)+2^2\cdot(n-2)+3^2\cdot(n-3)$$

$$+\dots+(n-1)^2\cdot 1$$

$$\sum_{k=1}^{n-1} k^2(n-k) \quad \text{oblice}$$

Arepte

$$\sum_{k=1}^{n} k^2 = \frac{n(n+1)(2n+1)}{6}$$

total

$$\sum_{k=1}^{n-1} k^2(n-k) + \sum_{k=1}^{n} k^2$$

$$\sum_{k=1}^{n-1} k^2 \cdot n - \sum_{k=1}^{n-1} k^3 + \sum_{k=1}^{n} k^2$$

$$n\sum_{k=1}^{n-1} k^2 - \sum_{k=1}^{n-1} k^3 + \sum_{k=1}^{n-1} k^2 + n^2 =$$

$$n \sum_{k=1}^{n-1} k^2 - \sum_{k=1}^{n-1} k^3 + \sum_{k=1}^{n-1} k^2 + n^2 =$$

$$(n+1)\frac{(n-1)\cdot n\cdot(2n-1)}{6} - \left[\frac{n(n-1)}{2}\right]^2 + n^2$$