

$$n=5$$

$$\sum_{i=1.. \lfloor n/2 \rfloor} 2(2i+1)i + 4 \sum_{j=1..i} j + 2i(2i-1)$$

$$= \sum_{i=1.. \lfloor n/2 \rfloor} 2i(2i+1) + 2i(i+1) + i(2i-1)$$

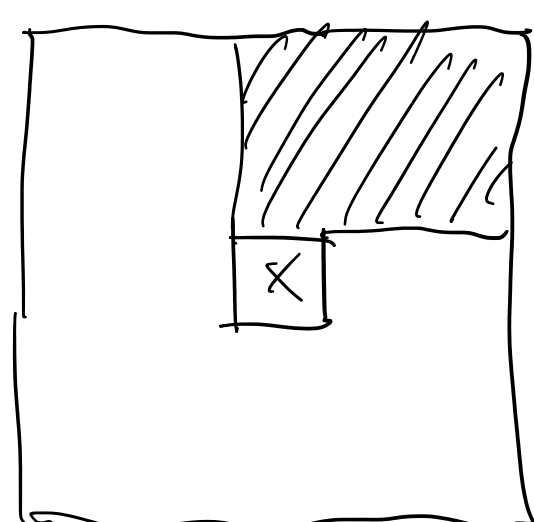
$$= \sum_{i=1.. \lfloor n/2 \rfloor} 2i(2i+1 + i+1 + 2i-1) =$$

$$= \sum_{i=1.. \lfloor n/2 \rfloor} 2i(5i+1)$$

$$i=1 \quad 6 + 4 + 2 \quad (12)$$

$$\begin{array}{ccccc} 1 & 1 & 1 & 1 & 1 \\ & 1 & 1 & 1 & 1 \\ & & 1 & 1 & 1 \\ & & & 1 & 1 \\ & & & & 1 \end{array}$$

$$i=2 \quad 20 + 12 + 2 = 34$$



$$\begin{array}{ccc} 2 & 3 & 4 \\ 1 & 2 & 3 \\ 0 & & \end{array}$$

$$4 \sum_{x=0..p} \sum_{y=1..p} x+y =$$

$$4 \sum_{x=0..p} x \cdot p + p \cdot \frac{(p+1)}{2} =$$

$$4 \cdot p \cdot \frac{(p+1)^2}{2} + 4p \cdot \sum_{x=0..p} x =$$

$$2 \cdot p (p+1)^2 + 4 \cdot p \cdot (p+1) \cdot p / 2 =$$

$$2 \cdot p (p+1)^2 + 2p^2(p+1)$$

$$p=1 \quad 8 + 4 = 12$$

Another diagonal moves!!!

$$4 \cdot \sum_{x=0..p} \sum_{y=1..p} \max(x,y) =$$

$$= \begin{array}{ccccc} 2 & 2 & 2 & 2 & 2 \\ 2 & 1 & 1 & 1 & 2 \\ 2 & 1 & 0 & 1 & 2 \\ 2 & 1 & 1 & 1 & 2 \\ 2 & 2 & 2 & 2 & 2 \end{array}$$

$$\sum_{i=1..p} i \cdot 4 \cdot 2i$$

$$= 8 \sum_{i=1..p} i^2$$

$$i=1 \quad \Rightarrow \frac{8}{3} \cdot 6 = 8$$

$$= \frac{8}{3} \cdot p(p+1)(2p+1)$$

$$i=2 \quad \Rightarrow \frac{8}{3} \cdot 2 \cdot 3 \cdot 5 =$$

$$= 40$$