

$$\sum_{i=0}^{n-2} (n-i-1) \rightarrow \sum_{i=0}^{n-2} n - \sum_{i=0}^{n-2} i - \sum_{i=0}^{n-2} 1 \rightarrow$$

$$n \cdot (n-1) - \frac{(n-2)(n-1)}{2} - 1 \cdot (n-1) \rightarrow$$

$$\frac{2n(n-1) - (n-2)(n-1) - 2(n-1)}{2} \rightarrow$$

$$\frac{2n^2 - 2n - (n^2 - 3n + 2) - 2n + 2}{2} \rightarrow$$

$$\frac{2n^2 - 2n - n^2 + 3n - 2 - 2n + 2}{2} \rightarrow$$

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