Bubble Sort

$$\sum_{i=0}^{n-2} \left(n - 1 - i\right) = (n-1) + (N-2) + \ldots + 2 + 1$$

$$= \frac{(n-1)n}{2} = n^2/2$$

Swap $(W-1)$

Passes $(N-)$

$$= O\left(n^2\right)$$