Selection Sort

$$O_b + \sum_{i=0}^{p-2} \left(O_p + \sum_{j=p+1}^{size-1} \left(O_j + PO_s \right) \right)$$

$$O_b + \sum_{i=0}^{p-2} \left(O_p + (size-i-1) O_j's \right) O_j + PO_s = O_j's$$

$$O_b + (p-1)\left(O_p + (size-i-1) O_j's \right)$$

$$O_b + (p-1) O_p + (p-1)(size-i-1) O_j's$$

$$O_b + pO_p - O_p + (p-1)(size-i-1) O_j's$$

$$(p-1)(size-i-1) O_j's + pO_p + O_b - O_p$$

$$p(size) + p + O_b \qquad \text{Let } size = n$$

$$p(n) + p + O_b \Rightarrow O(p \cdot n)$$

As p approaches n: $O(n^2)$