

Question #6

Non-Recursive

$$O_b + \sum_{i=2}^{n-1} (O_i + O_s)$$

$$O_i + O_s = O_1$$

$$O_b + \sum_{i=2}^{n-1} (O_1)$$

$$O_b + n O_1$$

$$c'n + c$$

$$c' = O_1$$

$$c = O_b$$

$$O(n)$$

Recursive

$$O_b + 2 \left(\sum_{i=2}^{n-1} (O_s) \right)$$

$$c' = O_s$$

$$O_b + 2(n O_s)$$

$$O_b + 2c'n$$

$$O(2^n)$$