

Handson 12

Ch# 17

1.

- a) Each insert costs $O(1)$, we have n inserts
hence, for ~~each~~ all inserts we get $O(n)$.
Each complex operation would cost $O(2n)$
because it doubles in size,

$$\frac{O(n) + O(2n)}{n} = \frac{O(n)}{n}$$

~~$O(2n)$~~ which is $O(1)$

- b) Normal : $O(1)$
Complex : $O(1)$

Each insert costs you \$3

\$1 cost of insertion

\$2 cost of future copying

So, it's always \$3 per operation
which is $O(1)$