

David Doo

1a. $T(n) = 1 + 1 + 1 + 2n + 3n^2 + n^2 + n^2$

Time complexity $O(n^2)$

b. $T(n) = 1 + 1 + 1 + 2n + 3n^2 + 3n^3 + n^3 + n^3 + n^3$

Time complexity $O(n^3)$

c. $T(n) = 2n + 2n^2 + n^2 + 2n^3 + 2n^3 + n^2$

Time complexity $O(n^3)$

Space complexity $O(n^2)$