Q1 Computer tight Big-Oh bounds for the following recurrences

    a. $T(n) = 8T(\frac{n}{4}) + O(n)$

       Solution:

       here

    b. $T(n) = 2T(\frac{n}{4}) + O(\sqrt{n})$

       Solution:

       here

    c. $T(n) = T(n-4) + O(n^2)$

       Solution:

       here

    d. $T(n) = T(\sqrt{n}) + O(n)$

       Solution:

       here