Questions : Find the time complexity of the below functions in **Θ** form. Write NA if the function does not apply to any case.

1. T (n) = 3T (n/2) + n

Solution : Θ (n^log3{base 2})

1. T (n) = 64T (n/8) − n^2(log n)

Solution : NA -- >Does not apply (f(n) is not positive)

1. T (n) = 2nT (n/2) + n^n

Solution : NA -- >Does not apply (f(n) is not bounded)

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1. T (n) = 3T (n/3) + n/2

Solution: Θ(nlogn)

1. T (n) = 7T (n/3) + n^2

Solution : Θ(n^2)