**PART 1**

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

Ans: Θ (nlog23 )

1. T (n) = 64T (n/8) − n^2(log n)

Ans: NA

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

Ans: NA

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

Ans: Θ (n log n)

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

Ans: Θ (n2)