Find the time complexity of the below functions in **Θ** form.

a)  T (n) = 3T (n/2) + n

**Answer: T(n) = Θ(nlog3 {base 2}) 🡪 (case 3)**

b)  T (n) = 64T (n/8) − n^2(log n)

**Answer: T(n) = Θ(n2log(1/n)) 🡪 (case 2)**

c)  T (n) = 2nT (n/2) + n^n

**Answer: NA 🡪 (a is not constant)**

d)  T (n) = 3T (n/3) + n/2

**Answer: T(n) = Θ(nlogn) 🡪 (case 2)**

e)  T(n)=7T(n/3)+n^2

**Answer: T(n) = Θ(n2) 🡪 (case 1)**