Question One Answers:

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

Answer: Θ $(n^{\log 3})$

2. T(n) = 64T (n/8) – n^2(log n)

Answer: NA

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

Answer: NA

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

Answer: Θ (n log n)

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

Answer: Θ (n^2)