a) T (n) = 3T (n/2) + n

Time complexity = Θ(n^(log23))

b) T (n) = 64T (n/8) − n^2(log n)

Time complexity = Θ((n^(log23)) log2n)

c) T (n) = 2nT (n/2) + n^n

Time complexity = NA

d) T (n) = 3T (n/3) + n/2

Time complexity = Θ(n log n)

e) T (n) = 7T (n/3) + n^2

Time complexity = Θ(n2)