Masters Theorem Solution:

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

Sol: T(n) = Θ(n^log2 base3)

1. T (n) = 64T (n/8) − n^2(log n)

Sol: T(n) = Θ(n^2logn)

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

Sol: T(n) = N/A as f(n) is not polynomial

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

Sol: T(n) = Θ(nlogn)

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

Sol: T(n) = Θ(n^2)