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

a=3

b=2

f(n)=n

Case 1 - Θ(nlog23)

T(n) = 64T(n/8)-n2logn

a=64

b=8

f(n)=-n2logn

f(n)<0, cannot be solved

T(n) = 2nT(n/2)+nn

a=2n which is a function of n. Cannot be solved.

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

a=3

b=3

f(n)=n/2

Case 2 - Θ(nlogn)

T(n) = 7T(n/3)+n2

a=7

b=3

f(n)=n2

Case 3 - Θ(n2)