PART 1

The time complexity of the below functions in Θ form.

a) T (n) = 3T (n/2) + n 🡪 T(n) = Θ ( n log 3) case1.

b) T (n) = 64T (n/8) − n^2(log n) 🡪 Does not apply f(n) is not positive.

c) T (n) = 2nT (n/2) + n^n 🡪 Does not apply ( a is not constant ).

d) T (n) = 3T (n/3) + n/2 🡪 T(n) = Θ (n^2 log n) case2.

e) T (n) = 7T (n/3) + n^2 🡪 T(n) = Θ ( n^2 ) case3.