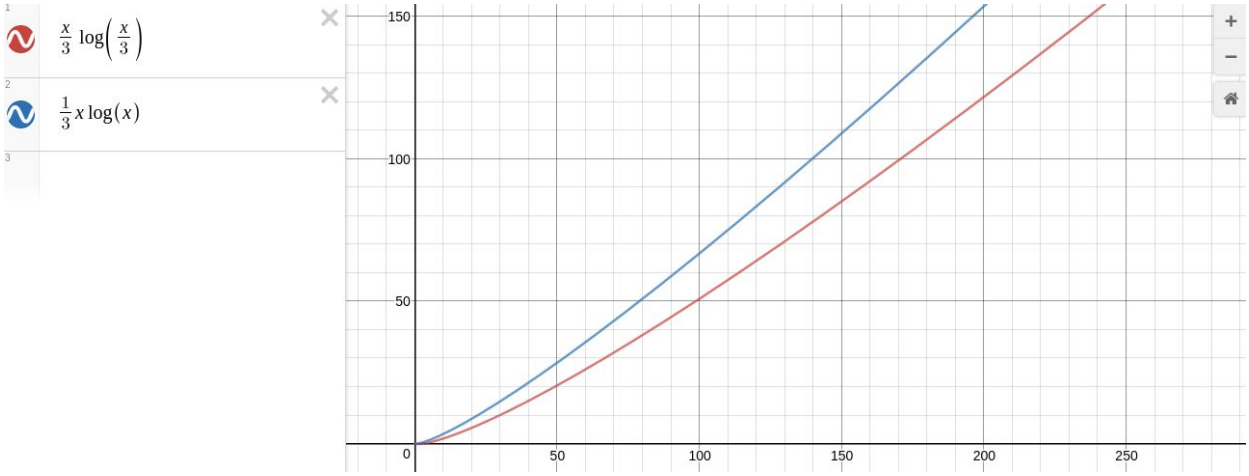
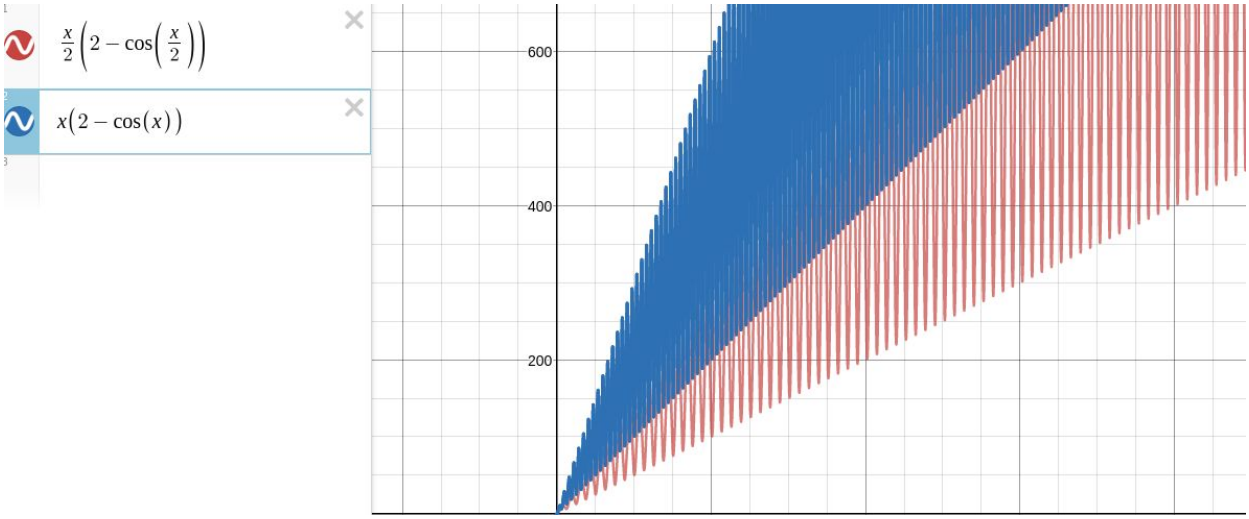


This graph is for the 3rd recursion, (n/3) log (n/3) =< ⅓ (n logn) , C = ⅓ < 1



As for the 5th recursion;

As shown, both graphs intersect even when c =1 so in order to get, n/2(2-cos(n/2)) < C.n(2-cos(n) , C has to be greater than 1.