**Master Theorem Solutions**

  1.T (n) = 3T (n/2) + n = **T(n)=Θ(nlog3)(Case1)**

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

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

4.T (n) = 3T (n/3) + n/2 = **T(n)=Θ(nlogn)(Case2)**

5.T(n)=7T(n/3)+n^2 = **T(n)=Θ(n2)(Case3)**