Time Complexity Solutions:

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

Ans:- **Θ(n^1.58)**

2. T (n) = 64T (n/8) − n^2(log n)

Ans:- **Θ(n^2 \* log(1/n))**

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

Ans:- **Does not apply, since “a” is not constant.**

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

Ans:- **Θ(n \* log n)**

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

Ans:- **Θ(n^2)**