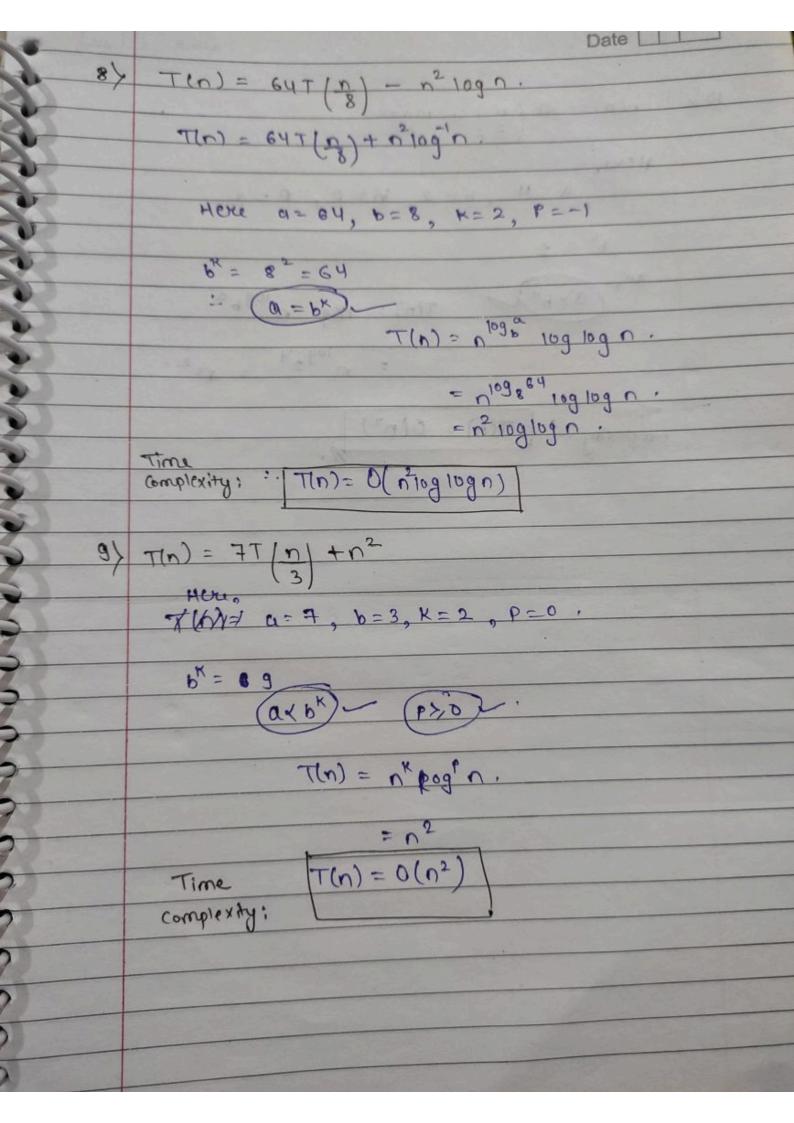


```
Then,
T(n) = (1) nog pa log p+1
                                                                            Putting values, . = 109,3 109 of 1
                                                                                                             Th) = O(nlogn)
                                      Time complexity: T(n) = O(n lugn)
GY T(n) = GT\left(\frac{n}{3}\right) + n^2 \log n.
                                      Here, a=6, b=3, K=2, P=1.
                                                                     bk = 32 = 9
                                                                         OX bk Now, (P)O)
                                                                                                        T(n) = n^{k} \log^{p} n
= n^{2} \log^{\frac{1}{2}} n
                                                     complexity: -. T(n) = O(n210gn)
  \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{1090}
                                               Here, a=4, b=2, 0K=1, P=-1
                                                        a b = 2
                                                                                                                                 :. (a> bx)
                                                                                       T(n) = \frac{1096^{\alpha}}{109.4} = \frac{109.4}{109.4} =
```



T(n) = 4T (n) + 10gn. 10/ Here, a=4, b=2, K=0, P=1. 80, (ay bx) T(n) = rog n 109 6 a = n 10g 24 = n2. Time :. [T(n) = O(n2)