

CS 3350 ICE

For each timing data set, determine which of the complexity classes given below best matches the growth rate in the data.

Classes: $O(\lg N)$, $O(N)$, $O(1)$, $O(N \lg N)$, $O(N^2)$

A	N	t
	10000	89
	20000	167
	40000	403
	60000	528
	80000	837

B	N	t
	10000	42
	20000	75
	40000	167
	60000	238
	80000	318

C	N	t
	10000	22
	20000	88
	40000	345
	60000	729
	80000	1165

D	N	t
	10000	8
	20000	16
	40000	36
	60000	61
	80000	81

E	N	t
	10000	7
	20000	21
	40000	50
	60000	62
	80000	86