

Class Participation Quiz

Complete and submit this within 15 minutes.

General Information

Last Name _____ First Name _____

ID Number _____ Email _____

Fill in the blanks (or select T/F):

_____ $T(n) = T(n/3) + O(1)$

_____ $T(n) = 2T(n/2) + O(1)$

Show proof on the back of this page.

T F Given two strings of length n, m , the edit distance between them can be computed in $O(nm)$ time.

T F Two matrices be multiplied in $\Omega(n^3)$ time.

T F Computing an independent set in a graph is an NP-Complete problem.

T F Jarvis-March is an example of divide and conquer algorithm.

T F One can find in linear time if a linked list has a cycle in it?

T F In the IO Efficient model, the number of IOs required to sort n entities is lower bounded by $O(n \log n)$.

T F Using FFT one can multiply 2 numbers in $O(n \log n)$ time.

T F $a = 01, b = 10, c = 100, d = 101$ is a uniquely decipherable code.