Quiz 1

Due Apr 5 at 11:59pm **Points** 8 **Questions** 8
Available Mar 29 at 11:59pm - Apr 5 at 11:59pm 7 days **Time Limit** 15 Minutes

This quiz was locked Apr 5 at 11:59pm.

Attempt History

	Attempt	Time	Score
LATEST	Attempt 1	3 minutes	8 out of 8

Score for this quiz: **8** out of 8
Submitted Apr 5 at 10:26pm
This attempt took 3 minutes.

Question 1 — 1 / 1 pts

Which of the following growth-rate functions grows the fastest in value?

- log n
- 1
- n^2 (Correct!)
- n

Question 2 — 1 / 1 pts

Which of the following growth-rate functions indicates a problem whose time requirement is independent of the size of the problem?

- n
- n^3
- log (n^2)
- 1

Correct!

Question 3

1 / 1 pts

An algorithm’s execution time is related to the number of _____ it requires.

- test data sets
- operations
- parameters
- data fields

Correct!

Question 4

1 / 1 pts

Which of the following can be used to compare two algorithms?

- computers on which programs which implement the two algorithms are run
- growth rates of the two algorithms
- implementations of the two algorithms

Correct!

test data used to test programs which implement the two algorithms

Question 5

1 / 1 pts

Algorithm efficiency is typically a concern for _____.

small problems only

Correct!

large problems only

problems of all sizes

medium sized problems only

Question 6

1 / 1 pts

The _____ notation defines an upper bound of an algorithm, it bounds a function only from above.

Correct!

Big O

Big Theta

Small Omega

Big Omega

Question 7

1 / 1 pts

The order of Insertion Sort average case is:

- O(n)
- Theta (n log n)

Correct!

- Theta (n^2)
- O(n log n)

Question 8

1 / 1 pts

The Merge Sort uses _____ algorithm technique:

- Greedy

Correct!

- Divide and Conquer
- Backtracking
- Dynamic Programming

Quiz Score: **8** out of 8