Quiz 2

Due Jan 21 at 11:59pm **Points** 8 **Questions** 8

Available Jan 12 at 11:59pm - Jan 21 at 11:59pm 9 days Time Limit 15 Minutes

Allowed Attempts 2

Attempt History

	Attempt	Time	Score
KEPT	Attempt 2	7 minutes	8 out of 8
LATEST	Attempt 2	7 minutes	8 out of 8
	Attempt 1	15 minutes	7 out of 8

Score for this attempt: **8** out of 8 Submitted Jan 21 at 5:53pm This attempt took 7 minutes.

	Question 1	1 / 1 pts
	What can a recurrence represent?	
	A recursive function that recurses on itself.	
	A divide and conquer solution for a probelm.	
	An equation or inequality that describes a function in terms of its value on smaller inputs.	
Correct!	✓ All of the above.	

Question 2	1 / 1 pts

What methods does the textbook present for solving recurrences?

The substitution method, Iterative functions, recursion tree

Recursion tree, Induction, Master theorem

Master theorem, The substitution method, Recursion tree

Iterative functions, Recursion tree, Master theorem

Which one of the following can represent an application of the substitution method?

Substitute some small values, guess the solution and prove by mathematical induction.

Make a guess using recursion trees and prove by mathematical induction.

Use back substitution to make a guess and then prove by mathematical induction.

All of the above.

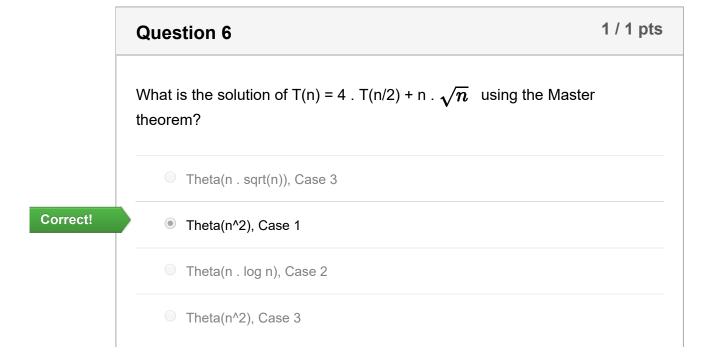
Question 4

Correct!

1 / 1 pts

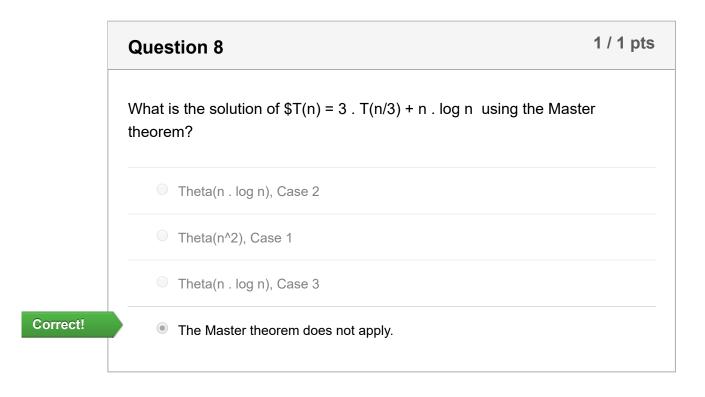
Using back substitution, what would be a guess for T(n) = T(n-1) + n?

Correct!	O(n^2) where n^2 means n to the 2
	O(n . log n)
	O(n)
	O(sqrt(n)) where sqrt() denotes the square root function.



Correct!

What is the solution of T(n) = T(3n/4) + 1 using the Master theorem? Theta(log n), Case 1 Theta(n . log n), Case 3 Theta(n), Case 1



Quiz Score: 8 out of 8