

MITx: 6.00.1x Introduction to Computer Science and Programming Using ...

PROBLEM 3 (10/10 points)

For each of the following expressions, select the order of growth class that best describes it from the following list: O(1), $O(\log(n))$, O(n), $O(n\log(n))$, $O(n^c)$ or $O(c^n)$. Assume c is some constant.

Clicking Check will grade ALL the sub-problems. You have 2 attempts for this problem.

1. 0.0000001n + 1000000



2. $0.0001n^2 + 20000n - 90000$



3. $20n + 900 \log(n) + 100000$

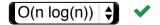


4. $(\log(n))^2 + 5n^7$

5. $n^{200} - 2n^{30}$

6. $30n^2 + n \log(n)$

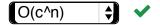
7. $n \log(n) - 3000n$



8. 3



9. $5^n + n^5 + n + 5$



10. $n \log(n) + n^2 + n + \log n + 1 + 2^n$



FINAL CHECK

SAVE

You have used 1 of 2 submissions

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