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Survey

Week 6: Algorithmic Complexity > Problem Set 6 > Problem 3

## **Problem 3**

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## Problem 3

10 points possible (graded)

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.

Download Python and **Get Motivated!** 

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

- ▶ Week 1: Python Basics
- 1. 0.0000001n + 1000000

Select an option **♦** 

- ▶ Week 2: Simple **Programs**
- 2.  $0.0001n^2 + 20000n 90000$

Select an option **♦** 

- ▶ Week 3: **Structured Types**
- 3.  $20n + 900 \log(n) + 100000$

Select an option ♦

- ▶ Week 4: Good **Programming** Practices
- 4.  $(\log(n))^2 + 5n^7$

Select an option **♦** 

- Midterm Exam
- 5.  $n^{200} 2n^{30}$
- Week 5: Object **Oriented Programming**
- Select an option ♦
- 6.  $30n^2 + n\log(n)$

Select an option ♦

▼ Week 6: **Algorithmic Complexity** 

## 11. Computational Complexity

Ø, Finger Exercises

12. Searching and **Sorting Algorithms** 

Finger Exercises

## **Problem Set 6**

Problem Set due Mar 9, 2017 15:30 PST

- ▶ Week 7: **Plotting**
- Exit Survey
- <u>Sandbox</u>

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

Select an option \$

8. **3** 

Select an option ♦

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

Select an option **♦** 

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

Select an option \$

Submit

You have used 0 of 2 attempts

Problem 3

Topic: Problem Set 6 / Problem 3

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