

Probability & Statistics for EECS:

Homework #13

Due on May 14, 2023 at 23:59

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Problem 1

1. $f(n)$

2. $f(n)$

3. $f(n)$

4.

$f(n)$

5.

$f(n)$

6.

$f(n)$ (1)

Problem 2

1.

$$\begin{aligned}
 n^2 + n + 1 &\leq n^2 + n^2 + n^2 \\
 &= 3n^2 \\
 &\leq c \cdot 2n^3
 \end{aligned}$$

2.

$$\begin{aligned}
 n^2 + n + 1 &\leq n^2 + n^2 + n^2 \\
 &= 3n^2 \\
 &\leq c \cdot 2n^3
 \end{aligned}$$
 (2)

3.

$$n^2 + n + 1 \leq n^2 + n^2 + n^2$$
 (3)

$$= 3n^2$$
 (4)

$$\leq c \cdot 2n^3$$
 (5)