

# Quickcheck 02: Asymptotic Analysis

---

Name:

**Definition: Dominated by**

A function  $f(n)$  is dominated by  $g(n)$  when...

- There exists two constants  $c > 0$  and  $n_0 > 0$ ...
- Such that for all values of  $n \geq n_0$ ...
- $f(n) \leq c \cdot g(n)$  is true.

Demonstrate that  $2n^3 - 3 + 9n^2$  is dominated by  $n^3$  by finding a  $c$  and  $n_0$ . Show your work.

## **Another question**

Do you have any questions about this course? It could be about policy, content, instructors, TAs, etc.