Quiz 1
CPSC 411 Spring 2009

Problem 1 (2 points)
State the definition of \( f(n) \in O(g(n)) \) for some functions \( f, g: \mathbb{Z} \rightarrow \mathbb{R} \) (assuming that the argument \( n \) approaches \( \infty \), as usual).

Problem 2 (1 point)
True or false. Is \( 4n^2 + 2n + 4 \in O(n^2 + n + 1) \)?

Problem 3 (2 points)
What is the divide-and-conquer paradigm?