CS 311 HW Assignment 3 (Due by 9am on Feb 20th)

1. Given $f(n) = 2n^2 + 7n + 3$, answer the following questions by "yes" or "no". [10 points]

   a. $f(n) = O(n^2)$?

   b. $f(n) = \Omega(n^2)$?

   c. $f(n) = \Theta(n^2)$?

   d. $f(n) = O(n)$?

   e. $f(n) = \Omega(2^n)$?

2. Given $f(n) = 7n^2 + 2n + 1$, prove that $f(n) = O(n^2)$. [10 points]

Submission
Submit the answers within one file (.pdf, .doc, .docx, .jpg, .png, etc.) to Cougar Course.

Grading
1. On Cougar Course, submit your answers in one file. Otherwise, we will not grade it.
2. Additionally, we will deduct 10% of the total points for each day after the due date.