MA 241 - Calculus II
Recitation Worksheet 5

Name: _____
Recitation Section: _____

1. Let

$$f(x) = \begin{cases} 0 & x \in (-\infty, 0) \cup (4, \infty) \\ C(-4x^3 + 16x^2) & x \in [0, 4]. \end{cases}$$

   (a) Verify that f is nonnegative.

   (b) Find a value for C such that f is a valid probability density function.