Math 16B: Short Calculus II
Spring 2017, Section 1
Homework Sheet 6
Due: Friday, May 19, 2017

Submit your solutions to the following problems in lecture on the due date above. Present your work in a clean and organized fashion, either on a printed copy of this document (preferred) or a separate sheet of paper. As stated in the syllabus, late submissions will **not** be accepted.

1. Evaluate the following integrals.

   (a) $\displaystyle \int x^2 e^{5x} \, dx$

   (b) $\displaystyle \int x^2 \ln(x^3) \, dx$

   (c) $\displaystyle \int e^{2x} \cos(e^{2x}) \, dx$

   (d) $\displaystyle \int \frac{x^2 - 3}{(x^2 - 1)(x + 1)} \, dx$