

Math 16B: Short Calculus II
Winter 2018, Section 3
Homework Sheet 6
Due: Wednesday, February 28, 2018

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) $\int x^2 e^{5x} dx$

(b) $\int x^3 \cos(x) dx$

(c) $\int x^2 \ln(x^3) dx$

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