

# Math 2315 - Calculus II

Homework #1 - 2007.08.23

Due Date - 2007.08.30

Name: \_\_\_\_\_

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Part 1: Problems from sections 7.1 and 7.2.

Part 2: The *fun* problems.

1. Compute

$$\int x^k \ln(x) dx, \quad k \neq -1$$

2. Compute

$$\int_{-1}^1 t^5 \cos^6(2t) dt$$

3. Compute

$$\int x e^x \cos(x) dx$$

4. Compute

$$\int x \cos^3(x) \sin^2(x) dx$$