

**Handout 11****MATH 140 Lab: Section 1****Lab Instructor (TA): Mohammed Kaabar**

Student's Name:-----

Student's ID:-----

*Note: This handout contains a review for definite integrals and integration by parts.***Problem 1: Evaluate the following integral:**

$$\int_1^2 x^3 \sqrt{x^4 + 5} dx$$

**Problem 2: Evaluate the following integral:**

$$\int_1^e \frac{(\ln(x))^2}{x} dx$$

**Problem 3:** Evaluate the following integral:

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