

Math 132

Worksheet 2 – January 31, 2012

Name _____

1. Evaluate the following definite integrals:

(a) $\int_0^\pi \cos 2x \, dx$

(b) $\int_0^1 e^x \sqrt{e^x + 1} \, dx$

(c) $\int_0^1 e^{2x} \sqrt{e^x + 1} \, dx$

(d) $\int_{-1}^0 \frac{x}{1-x} \, dx$

2. Evaluate the following indefinite integrals:

(a) $\int \sin \theta \cos \theta \, d\theta$

I know three different ways to solve this one! Can you find all three?

(b) $\int \cos^4 x \, dx$

Hint: the technique of Example 7 from Chapter 5.5 may help.

(c) $\int \cos^3 x \, dx$