Math 132
Worksheet 7 – March 6, 2012

Name _____

1. Evaluate the following integrals:

(a) $\int \dfrac{x^4}{x^2 - 2x + 1}\, dx$ (for $x > 1$).

(b) $\int \dfrac{e^{4x}}{\sqrt{1 - e^{2x}}}\, dx$

2. Find a "good" (fairly close to the actual value) upper bound for

$$\int_0^{100} \frac{1}{1+x^4} \, dx.$$

Hint: It may be helpful to start by bounding $\int_1^{100} \frac{1}{1+x^4} \, dx.$