

Name _____

Homework 7
section 7.7

Determine whether each of the following integrals converges or diverges, and if it converges, find its value.

1. (5) $\int_2^{\infty} \frac{1}{4+z^2} dz$

2. (5) $\int_{-\infty}^{\infty} xe^{-x^2} dx$

3. (5) $\int_{-1}^1 \frac{x^4 + 1}{x} dx$

4. (5) $\int_{\pi/3}^{\pi/2} \frac{\sin x}{\sqrt{\cos x}} dx$