

Name \_\_\_\_\_

Homework 6  
Section 7.6

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

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

$$2. (5) \int_2^{\infty} \frac{1}{x(x-1)} dx$$

3. (5)  $\int_{-\infty}^{\infty} te^{-t^2} dt$

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