

Quiz 3

Name: _____

Improper Integrals

Math 408D:

Instructor: Athil George

Problem 1. Does the following integral converge or diverge? If it converges, find the convergent value.

$$\int_0^{\infty} e^{-x} \cos(x) dx$$

Problem 2. Does the following integral converge or diverge? If it converges, find the convergent value:

$$\int_1^{\infty} \frac{2}{\sqrt{x^3}} dx$$