Quiz 4

Student ID Number: Name ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯

Math 2B, 12PM

Please justify all your answers   November 14, 2019

Please also write your full name on the back

1. Evaluate the improper integral or show that it is divergent.

$$\int_2^\infty \frac{dx}{x \ln x}$$

2. Given that $\int_1^\infty \frac{dx}{x^2}$ converges, decide whether or not $\int_1^\infty \frac{dx}{x^2+1}$ converges *without computing the integral directly*. Explain your reasoning.