

Name: _____ Quiz 4: Partial Fractions & Improper Integrals
MAT 296 Spring 2015

Problem 1: Integrate the following:

$$\int \frac{3x + 1}{(x - 2)(x + 5)} dx$$

Problem 2: Find the value of the following integral or show that the integral does not converge.

$$\int_2^{\infty} \frac{dx}{\sqrt[3]{(x-1)^2}} dx$$

Problem 3: Use the Comparison Test to determine if the following integral is convergent or divergent.

$$\int_1^{\infty} \frac{6x}{3x^5 + 1} dx$$