

Math 4213 - Complex Analysis

Quiz #16 - 2012.03.12

Name: _____

1. What is the difference between $\int_{-\infty}^{\infty} f(z) dz$ and P.V. $\int_{-\infty}^{\infty} f(z) dz$? Hint: Remember how we defined the first in Calculus 1 as a sum of limits.

2. Locate all of the poles of the following function and determine their order.

$$f(z) = \frac{\sin(z)}{z(z^2 + 1)^2}$$