

Math 4213 - Complex Analysis

Quiz #14 - 2012.03.05

Name: _____

1. On what type of region is a Laurent series convergent?

2. Compute the following integral:

$$\int_{\mathcal{C}} \frac{\sin(z)}{(z-i)^2(z+2)^2} dz$$

where \mathcal{C} is a rectangular contour, oriented counter clockwise, with corner points $\{-1 + 2i, 1 + 2i, 1 - i, -1 - i\}$.