
Assignment 8

MA06 Complex Analysis

Deadline 11:59 AM, 20190111

1. Use Theorems 5.9 and 5.10, when appropriate, to evaluate the given integral along the indicated closed contour(s).
 - (a) $\oint_C \frac{4}{z-3i} dz; |z| = 5$
 - (b) $\oint_C \frac{z^2}{(z-3i)^2} dz; |z| = 5$
 - (c) $\oint_C \frac{\cos 2z}{z^5} dz; |z| = 2$
 - (d) $\oint_C \frac{1}{z^3(z-1)^2} dz; |z-2| = 5$
2. *Proceed as in Example 5.5.5 to find the maximum modulus of the given function on indicated closed circular region.
 $f(z) = -iz + i; |z| \leq 5$

Notice 1: The question marked with * is an optional question.

Notice 2: Please write Your Name and Student ID when you submit.