
Assignment 6

MA06 Complex Analysis

Deadline 11:59 AM, 20190104

1. Evaluate the given integral along the indicated contour.

- (a) $\int_C (z + 3)dz$, where C is $x = 2t$, $y = 4t - 1$, $1 \leq t \leq 3$
- (b) $\int_C (2\bar{z} - z)dz$, where C is $x = -t$, $y = t^2 + 2$, $0 \leq t \leq 2$
- (c) $\oint_C \operatorname{Re}(z)dz$, where C is the circle $|z| = 1$, $0 \leq t \leq 2\pi$
- (d) $\oint_C \bar{z}^2 dz$, where C is given in Figure 1.

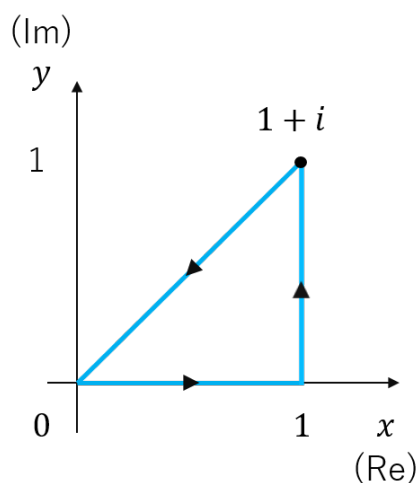


Figure 1. For Question 1(d).

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