

Problem 4.1. Taylor 2.3.2

Problem 4.2. Taylor 2.3.5

Problem 4.3. Taylor 2.3.7

Problem 4.4. Taylor 2.3.13

Problem 4.5. Taylor 2.4.2

Problem 4.6. Taylor 2.4.10

Problem 4.7. Taylor 2.6.3

Problem 4.8. Taylor 2.6.5

Problem 4.9.

- (1) Provide a parameterization $\gamma(t)$ of a path in \mathbb{C} with traces clockwise the triangle with vertices $(0, -1)$, $(1, 1)$ and $(-1, 1)$.
- (2) Compute explicitly the integral

$$\int_{\gamma} \frac{dz}{z}.$$

- (3) How does your answer agree with the conclusion of Cauchy's Integral Theorem?

Problem 4.10. Taylor 2.6.12