Assignment 5

MA06 Complex Analysis

Deadline: 17:00, Monday, Jan 8, 2024

- 1. Find all values of the given complex power. (Hint: Example 4.2.1 in Lecture 5)
 - (a) $(-1)^{3i}$
 - (b) $(1+i)^{1-i}$
- 2. Find the principal value of the given complex power 2^{4i} . (Hint: Example 4.2.2 in Lecture 5)
- 3. Express the value of the trigonometric function $\cos(2-4i)$ in the form a+ib. (Hint: Example 4.3.1 in Lecture 5)
- 4. Find the derivative of the given function $\sin(z^2)$.

Notice:

Please write your Email title as "A{Assignment Number}-{Your Student ID}-{Your Name}".