**Myanmar Institute of Information Technology, Mandalay **

**II Semester (2024-2025)**

**MATH 3020 (Mathematics VI)**

**Assignment I**

**Date: Max Marks:**

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**Answer All questions.**

1. Consider the linear transformation and determine the region in the w plane into which the rectangular region bounded by the lines

in the z plane is mapped.

2. Find the linear fractional transformation that maps respectively.

Also find the image and sketch on the w plane of the circle in the z plane under the mapping

3. Find the region and sketch on the w plane of the region in the z plane under the mapping .

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