



# III BRAC University

Department of Mathematics and Natural Sciences

**Total Points: 15**

**Assignment-01**

**Course Code: MAT215**

Complex

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**Section: 12**

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**Submission Date:** \_\_\_\_\_

*Assigned by*

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**?** Question 1

Find all possible values of  $z$  such that

$$z^7 = -64\sqrt{3} - 64i$$

Locate them in the complex plane. Show that they are contained in a circle and find the radius of that circle. Also find the angular distance between two adjacent roots.

 Solution:

**Question 2**

Consider the equation

$$|z - 9i| - |z + 9i| = 10$$

Describe the above locus in the complex plane

 Solution: