

Name: Azeedo Cabemisa
matric no: 19150102
Dept: microbiology
College: of sciences
Course code: mat 101
mat 101 assignment

$$\operatorname{Re} z = \frac{z + \bar{z}}{2} \quad \text{and} \quad \operatorname{Im} z = \frac{z - \bar{z}}{2}$$

- 1) Empty set is a set which contain no element
2) Singleton set is a set which contains only one element

2) $A = 2 + 7i$

$$B = 9 - 5i$$

$$(A/B) = \frac{2+7i}{9-5i}$$

$$= \frac{2+7i}{9-5i} \times \frac{9+5i}{9+5i}$$

$$= \frac{18 + 10i + 63i + (-35)}{81 + 45i - 45i - 25} = \frac{-17 + 73i}{106}$$

ii) $B - A = (9 - 5i) - (2 + 7i)$
 $9 - 5i - 2 - 7i$
 $7 - 12i$