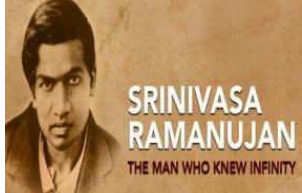
 <div>SRM INSTITUTE OF SCIENCE & TECHNOLOGY <small>(Deemed to be University u/s 3 of UGC Act, 1956)</small></div>	SRM Institute of Science and Technology Kattankulathur		
	DEPARTMENT OF MEATHEMATICS		
	18MAB102T ADVANCED CALCULUS & COMPLEX ANALYSIS		
	UNIT –IV Mapping and Bilinear Transformation		
Sl.No.	Tutorial Sheet -3		Answers
Part – A			
1	Find the images of the $z + 1 = 1$ where the map $w = \frac{1}{z}$ –		$u = -\frac{1}{2}$
2	Find the images of the $z - 2i = 2$ where the map $w = \frac{1}{z}$		$v = -\frac{1}{4}$
3	Describe about $w = \frac{1}{z}$ transformation.		
4	Define Bilinear Transformation		
Part – B			
5	Find the bilinear map which maps the points $z = 1, i, -1$ onto the points $w = i, 0, -i$		$\frac{-z + i}{z + i}$
6	Find the bilinear map which maps the points $z = \infty, i, 0$ onto the points $w = 0, -i, \infty$		$\frac{1}{z}$
7	Find the bilinear map which maps the points $z = 0, 1, \infty$ onto the points $w = i, 1, -i$		$\frac{z + i}{1 + iz}$

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