

Sunrise Secondary School Academic year 2023/2024 1st Secondary Education

	Group:	Date: .	
Answer the questions in the spaces provious on the back of the page.	ded. If you run out	of room for an a	nswer, continue
1. Given the equation $x^n + y^n = z^n$ for $(x^n + y^n) = z^n$	(x,y,z) and $n$ positi	ve integers.	
(a) For what values of $n$ is the statement			
(b) For $n = 2$ there's a theorem with a s	pecial name. Wha	t's that name?	
(c) What famous mathematician had as	n elegant proof fo	r this theorem b	out there was not
enough space in the margin to write it do			
2. Prove that the real part of all non-trivia	al zeros of the fund	ction $\zeta(z)$ is $\frac{1}{2}$ .	