

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

 $\begin{array}{c} {\rm Mathematics} \\ {\rm 2nd~Assessment~1st~Exam} \\ {\rm Radicals~and~fractions} \end{array}$

ly School	Surname: Name: Group: Date:	
1	er the questions in the spaces provided. If you run out of room for an answer, conon the back of the page.	
1. Giver	In the equation $x^n + y^n = z^n$ for (x, y, z) and n positive integers.	
	or what values of n is the statement in the previous question true?	(10 points)
(b) Fo	or $n=2$ there's a theorem with a special name. What's that name?	(10 points)
(8) 10	The 2 diete 5 d dietecim with a special fame. What 5 that fame.	(10 positios)
, ,	hat famous mathematician had an elegant proof for this theorem but there was not space in the margin to write it down?.	(10 points)
2. Prove	e that the real part of all non-trivial zeros of the function $\zeta(z)$ is $\frac{1}{2}$.	(20 points)