1003-01-645   **Yibao Xu*** (`xuyibao@hotmail.com`), Department of Mathematics, Borough of Manhattan Community College/CUNY, 199 Chambers Street, New York, NY 10007. *Does the Chinese Term "mian" Really Equate with the Concept of Irrational Number?*

Recently, some historians of Chinese mathematics have argued that the term "mian" in the Jiuzhang Suanshu (The Nine Chapters on Mathematical Procedures), the most important ancient Chinese mathematical classic compiled no later than the second half of the first century C.E. with a commentary by Liu Hui (fl. 263 C.E.), is equivalent to the concept of irrational number. By examining the possible meanings of "mian" in broad mathematical contexts, especially in the Nine Chapters and in Liu Huis commentary, this talk will analyze whether or not its interpretation as "irrational number" can be upheld. The related question of whether or not the concept of irrationality could have been developed without a concept of geometrical magnitude will also be considered. (Received September 25, 2004)