

1035-Z1-323 **Heakyung Lee*** (leeh@winthrop.edu), Department of Mathematics, Winthrop University, Rock Hill, SC 29733. *Magic squares and a magic tortoise developed in the 17th century in Korea.* Preliminary report.

A Korean mathematician in the 17th century, SukJung Choi, developed a variety of magic squares and a magic tortoise. Especially, he created a 9x9 magic square that contains 9 blocks of 3x3 magic squares with same sum. He also designed a magic tortoise containing 9 hexagones by using numbers 1 through 30, where each hexagon has the sum of 93. In this presentation, we will demonstrate some of his work and compare with a magic square developed in ancient China. A general idea of his work can be applied to a larger magic square and a magic tortoise with a different sum. (Received September 02, 2007)