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(syarahmadian@math.msstate.edu), Department of Mathematics and Statistics, Allen Hall 410, Mississippi State, MS 39762. *Golden Ratio: Ornamentations of Chehelsotoun, a Safavid Dynasty Palace in Isfahan, Iran.* Preliminary report.

The architecture of Safavid Dynasty is considered as the summit of this art in Iran. The beauty of the structures in this school is closely linked to the mathematical harmonies in the proportions of the building itself and also in the decorative elements. Chehelsotoun, a royal palace of this period, is chosen for the first time to examine such a relationship. In this study we will demonstrate how the Golden Ratio has been used in the ornamentations of this magnificent building. (Received September 22, 2012)