

**ZMATH 2010e.00713**

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**CarpetMath: exploring mathematical aspects of Turkmen carpets.**

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Summary: The exhibition, 'For Tent and Trade: Masterpieces of Turkmen Weaving', organized by the M.H. de Young Memorial Museum of the Fine Arts Museums of San Francisco offered new opportunities to explore the aspects of mathematics in Turkmen rugs. We present educational resources developed for the Education Department of the Fine Arts Museums of San Francisco which were initially designed for a teacher-training workshop held in conjunction with this exhibition. Following an introduction to the Turkmen people and their historic dependence on pastoralism, we explore the mathematical aspects of Turkmen carpets. These explorations address various topics within the curriculum and are suggested for different age groups: counting units and fractions (K-5); symmetry and geometry (grades 6-8) and algorithms (high school).

*Classification:* M80 G10

*Keywords:* carpet; weaving; geometry; Islamic pattern; symmetry; Turkmen; Central Asia

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