Toke L Knudsen\* (toke.knudsen@oneonta.edu), Department of Mathematics, SUNY Oneonta, 108 Ravine Parkway, Oneonta, NY 13820. The Constructive Geometry of the Śulbasūtras.

The oldest systematic presentation of mathematics in India is found in the texts known as the  $\acute{Sulbasūtras}$ , "Rules of the Cord," generally dated to 800–200 BCE. Appendices to ritual texts, they provide the mathematical knowledge necessary for measuring out arenas and constructing brick altars for various sacrifices. Included in this body of knowledge is the practical construction of geometrical figures, combination of geometric figures, and transformation of a figure to another figure of the same area (including transforming a square into a circle and a circle into a square). That the geometry of the texts is meant for practical constructions links it to its historical context and is therefore a fruitful example for the classroom. The talk will discuss the geometry of the texts, its practical execution, and its historical context. (Received September 23, 2012)