

1135-01-100

Donald A. Sokol* (3471das@gmail.com), Donald, A., Sokol, Burr Ridge, IL 60527. *Plimpton 322: Rosetta Stone Part deux.*

The ancient world tablet created by the Babylonians and identified as Plimpton 322 in the museum at Columbia University introduced the people of that period (circa 1800 B.C.) to the algorithm used to calculate a specific form of what was later presented by the Greeks as the Pythagorean Theorem. Both the Babylonians and Greeks were reluctant to recognize square roots and negative numbers as legitimate in mathematics and left much about them unsaid in the Tablet and Theorem. Euclid finished the task by eliminating them from further discussion in his treatise *The Elements*. This presentation begins where the Babylonian tablet (Plimpton 322) ends and addresses scale and orientation. Several other algorithms not covered in the earlier work are also discussed. (Received July 26, 2017)