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Plimpton 322: The Rosetta Stone of the Integer (Pythagorean) Triple.

The Babylonian Clay Tablet (circa 1800-1700 B.C.) identified presently as Plimpton 322 in the museum at Columbia University represents the opportunity for a new look at the Pythagorean Theorem. The tablet has 15 lines of information related to the relationship, $a^2+b^2=c^2$. Line 11 contains the values c=75 and b=45 of a integer triple in a, c and b. The value of "a", although missing, has been identified by numerous others as 60. These values are multiples of the prime integer triple 4, 5, 3 and the multiplier is 15. And 60, 75, 45 are also multiples of 1.0, 1.25, o.75, and the multiplier is 60 (The triangular number for one is 1) . The result is a:60 as Nt: 15 and a=4Nt, where Nt is a triangular number, and "a" is the even value in an integer triple. The modifier for accommodating changes in x and y in an appropriate spread sheet mapping is y(x-1)/2; so that a=4[y(y+1)/2+y(x-1)/2]=2(x+y)y. Also, $c=a+x^2$ and $b=c-2y^2$. Square roots and negative numbers, avoided by both Babylonians and Greeks address scale and orientation. (Received July 12, 2016)