triples of Pythagoran numbers; that is, numbers satisfying the relationship $a^2 + b^2$ ::c^2 .,,11 "The facility of numerical computation, as the result of the place value notation, is everywhere visible in Babylonian mathematics."1~ The Babylonians had a sort of combination between base 10 and base 60 with a zero.[13]

The acomplishments of ancient Greece dwarfed those of Egypt and Babylon, and rival the achievements of the 17th and 18th centuries! It was during this period that such great men as Pythagoras, Euclid, and Archimedes lived. "The Greeks insisted that mathematical facts must be established not by empirical procedures but by deductive reasoning.,,14 This led to a system of undefined terms, axioms, theorems et cetera.[15] Although most Greek mathematic; "Purely algebraic notation had been

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11 "Mathematics, History", Encyclopedia Britannica, volume 11, page 644

12 Ibid

13 Bases are a part of the place value notation, that is the position of each digit tells its magnit~de. For ~xample, t~e number ~94071 means 3 x 10 ".9 x 10 + 4 x 10 + 0 x 10 +7 x 10 + 1 x 1. If we were to write a number in another base besides base 10 ~t would be like: 13702 (base 8) equals 1 x 8 + 3 x 8^3 + 7 x 8^2 + 0 x 8 + 2 ~ 1, of B3AI06 (base 12) = BO(11) x 12^5 + 3 x 124 + A (10) x 123 + 1 x 122+ x 12 + 6 x 1. All bases need the number of different charactors equal to the number of the base (zero is one of the digits). ~ithout zero a place value system cannot exist, the number 57,302, for example, would have to be written 5732, which could mean 500,732 or 5,732,000Qr just 5732 or any number of other things.

14 "Mathematics", Encyclopedia Americana, volume 17, Page 393

15 Michal Moffatt, The ages of Mathematics vol. 1, page 67