system of reastablishing land boundries.,,4 Increased barter increased the need for early practical arithmatic.⁵ The need for a calender, if a basic one, led to development in mathematics; "'theastronomy of the old Babylonian period was just adequate for maintaining the calender, on which the irragation system supporting the civilization depended.,,6 Civilization and mathematics are inseperable i. ~. "Mathematics beyond primitive counting originated wi*n the evolution of advanced form ...=sofiety."⁷ As Aris-t.Q)tlonce pointed out; a civilization is necessary "to; Sl'eperate thinking class from the working class.

Early mathematios~consisted almost exclusively of trfualand error. Early Egyptian mathematics was geometry.8 The Egyptians also developed formulas for the areas and volumes of many shapes, but used trial and error rather than proofs, so they were not entirely correct in their formulas.⁹ The Babyloneans were only more advanced than the Egyptians. "The Babylonians were interested in number relations beyond the merely practical mathematics.,,10 i. e. "An old Babylonian text (1700 B. C.) investigates

4 "Mathematics", <u>Encyclopedia Americana</u>, volume 17, page 392

- 6 Michal Moffatt, <u>The ages of Mathematics vol. 1</u>, Page 35
- 7 "Mathematics", Encyclopedia Americana, volume 17, Page 388
- 8 The word geometry is from a ~reek word meaning ."measure of the land".
- 9 Michal Moffatt, <u>The ages of Mathematics vol. 1</u>, page 43

2

⁵ Ibid