The beginning of algebra thesis sample

Technology, Development

Thesis Statement

Algebra is one of the broadest terms used in the field of mathematics with its application in real life situations traceable way back in the ancient Babylonian times over four thousand years ago. The development of algebra was based on finding a solution to solving arithmetic equations mostly in the religious rituals and dilemmas. Most of the renown historical mathematicians such Rene Descartes made some of the major contributions to the development of the modern algebra whereby he came up with la geometre, a publication which focused on improving problem solving techniques in the field of geometry. However, the origin of algebra is noted to originate from the famous Greek mathematician Diophantus also referred to as ' the father of algebra' and his work of arithmetica (Rashed, 2009). The etymological origin of the world algebra is derived from an Arabic word ' al-jabr' which means calculation through balancing and equation as it was written by a famous Persian mathematician over 800 years ago (Lennart, 2007). This shows that the main motive that led to the finding and development of algebraic structures in mathematics was as a result of finding a way of solving basic arithmetic problems presented through linear equations.

The tremendous efforts that took place to invent and apply algebra structure in mathematics were however faced with controversial curiosity including a question on who really invented algebra whether it was Diaphanous or the Persian mathematician. Also some of the major developments that shaped the modern algebra which has several sub units as used in the field of mathematics calls for a critical historical research so as to have a clear understanding on these developments as applied in real life situations.

Research outline

The research will cover various sub topics in regard to the history of algebra as indicated.

Problem statement in regards to how algebra came into existence

Research questions

Background information

Assumptions and limitations

Literature review regarding previous researches on the topic

Research Methods and design

References

Lennart, B. (2007). " Mathematics in Medieval Islam". The Mathematics of Egypt, Mesopotamia, China, India, and Islam: A Sourcebook. Princeton University Press.

Rashed, R. (2009), Al Khwarizmi: The Beginnings of Algebra, Saqi Books.

Warwick, A. (2003) Masters of Theory: Cambridge and the Rise of Mathematical Physics, Chicago: University of Chicago Press.