## Pierre de fermat

Pierre de Fermat was born on August 7, 1601 in Beaumont de Lomagne, France. He died in Castries on January 12, 1665. His father was a merchant of leather. He got his education at home and received a law baccalaureate from the University of Orleans, after which in the year 1634, he got a post of a local councilor for his local parliament at Toulouse. In the year 1638, he was appointed at the criminal court. He executed his duties at the parliament with fidelity and scrupulous accuracy. He spent his leisure time amusing himself with mathematics.

He was involved in some dispute with the Descartes on the validity of the analysis of the method used for tangent curve. The dispute emanated from the Descartes obscurity, but Fermat was cautious; thus, this led to a friendly conclusion. His views were proved by Sir Isaac Newton 30 years later. He was a scholar who enjoyed analyzing the work of Apollonius on plane loci (Svarney and Svarney, 117).

Despite the fact that he contributed to the development of so many theories in his life, he never published any of his work. This is because he was not very fluent in prose writing and he wanted to communicate with the numbers, which was not very familiar for the largerpopulation at that time. Some of his works were actually found after his death; therefore, it becomes difficult to ascertain the dates of most of the works (Svarney and Svarney, 118).

He is referred to be the founder of the theory of modern numbers. The theory of numbers is the branch of mathematics that is considered to be his favorite, since this is where most of his striking discoveries were
concentrated. He was among the leading mathematicians in the first half of the 17th century. Working together with Braise Pascal, they founded the theory of probability. He developed enthusiasm in the theory of numbers, and he exchanged letters with Braise Pascal on probability, the results of which were later published. He was also very much influenced by Diophantus, a 3rd century Greek mathematician. He had discovered new figures in the field of mathematics - higher numbers. Besides, he concentrated on the properties of prime numbers.

His major contribution to mathematics included the theory of numbers: an elegant discovery that every prime number in the form of $4 n+1$ is a sum of two squares. This later came to be known as Fermat's Lesser theorem. He also participated in the coordinate geometry, which lead to the crreation of the Cartesian coordinates and his remarkable work also known as " Fermat's last theorem" has no non-zero solution. However, his discovery had no proof, making it appear skeptical; but later it was solved by an English mathematician Andrew John Wiles. He also contributed to the use of analysis geometry and infinitesimals, which lead to the creation of calculus in the study of properties of a curve. Moreover, in their exchange of letters with Pascal, they formulated the theory of probability (Ball, 1).

Most of Fermat's quotes were in mathematics, as this is where his interest lied. For example, his famous Last theorem is as follows: " to divide a cube into two other cubes, a fourth power or in general any power whatsoever into two powers of the same denomination above the second is impossible and I have assuredly found an admirable proof of this, but the margin is narrow to contain it" (Pierre de Fermat Quotes, 1).

Pierre de Fermat was an outstanding mathematician and a leader who performed his duties articulately. However, and that intrigues me the most, he did not want to take the praise for his discovery and as a result, most of his works were published after his death.

