# Rene descartes a brilliant man

Philosophy

Rene Descartes Rene Descartes was a brilliant man. His works onphilosophy, physics andmathematicsare still heavily influenced much to all of these studies today in our modern world. Descartes was born in March 31, 1596 in La Haye, France; he was named after one of his godfathers, Rene Bruchard des Funtaines. Descartes parents were Joachim and Jeanne Descartes, he also had one brother and one sister and two half siblings. Growing up Descartes hadhealthissues “ infirmity of the lungs, (Rene Descartes). When he was enrolled in school around eight years of age at Jesuit college La Fleche in Anjou he had permission to wake up at eleven in the morning instead of earlier like all the other school kids, in regards to his fragile health. Descartes kept this daily routine for almost the rest of his life he believed that, “ the only way to good work in mathematics and to preserve his health was never to allow anyone to make him get up in the morning before he felt inclined to do so; an opinion which I chronicle for the benefit of any schoolboy into whose hands this work may fall, (A Short Account of the History of Mathematics’). Descartes left school at around 1912 and they began to study law at Poiters, and graduated with honors for his degree and license in law, although he didn’t pursue a law degree. In 1617 Descartes chose to join the army rather than the church; He served in the army of Prince Maurice of Orange and then Breda. He was more of a mercenary for the Catholics and Protestants. One day in late fall of 1618, Descartes was walking around and saw a Dutch placard, which spiked his curiosity; and by luck the person he stopped was Isaac Beckman.

Beckman was a highly educated Dutch philosopher; he translated for Descartes in return if Descartes would work out the problem. After a couple

of hours passed, intrigued by Descartes, Beckman “ sparked his interest in mathematics and the New Physics, he concluded that his real path in life was the pursuit of true wisdom andscience, (17th Century Mathematics-Descartes). ” During his leisure time in the army, Descartes studied mathematics; in November 10th-11th, 1619 he had a series ofdreamsthat he believed is one or the most important days of his life.

The visions he had were his first ideas of new philosophy and his works of analytical geometry. He continued to serve in the army under hisfamilytraditions and influence and was persuaded to volunteer under Count de Bucquoy in the army of Bavaria, and then he resigned his commission in 1621. Descartes traveled throughout parts of Europe for a couple of years still purely giving himself to mathematics in 1628 while residing in France he met Cardinal de Berulle, the founders of the Oratorians. Berulle loved his conversation with Descartes, “ and he encouraged Descartes to devote his life to the study of truth, (Rene Descartes-Biography). For the nest twenty years Descartes lived in seclusion in Holland and made regular trips to France. In the course of time Descartes wrote a piece of his collections, “ Le Monde”, he didn’t want it to be published in that time; because the Catholic church had burnt all of Galileo’s Dialogue Concerning the Two Chief World Systems (1632) and him in house arrest. Descartes had lived in fear the same thing could happen to him if he didn’t correspond with the rules. Yet he was book “ Le Monde” was published many years later.

Despite not being able to release that book, he did write another book in 1633 and was published in 1937. “ In 1637 Descartes published Optics,

Meteorology, and Geometry, a collection of essays. The preface to the collection is titled Discourse on the Method of Rightly Conducting the Reason and Seeking the Truth in the Sciences, (Rene Descartes-Biography). ” “ La Geometrie” is what his contribution to mathematics is still used till this day. Before his discovery mathematicians used capital letters (A, B, C) for known quantities in algebraic notation and unknown quantities were lower case letters (a, b, c).

In the “ La Geometrie” he gave his ideas and instead of using capital and lower cases letters, he shifted it to just (a, b, c) as know quantities and (x, y, z) for unknown. In that time he also in verbal expression of exponents such as “ square, cube at etc”, he replaced it with numeral superscripts. Descartes argued that, For the square of a magnitude did not differ from it in kind, as a geometrical square differs from a line, rather, the square the cube and all powers differed from the base quantity only in the number of “ relations” separating them respectively from a common unit quantity.

That is since: 1: x= x; x2 = x2: x3=... (Descartes: Mathematics and Physics) Descartes “ rule of signs” a law given for determining whether the number of positive or negative real roots of polynomials “ Descartes’ “ rule of signs” does not give the solution of a polynomial equation, but it does give information on the number of positive and negative roots of the polynomial, (17th Century Mathematics-Descartes). ” He also proposed in “ La Geometrie” that each point in a two dimension form can have two numbers on a plane, giving a horizontal and vertical locations; which is known as Cartesian coordinates. He used perpendicular lines (or axes) crossing at a point called the origin, to measure the horizontal (x) and vertical (y)

locations, both positive and negative, thus effectively diving the plane into four quadrants, (17th Century Mathematics-Descartes). ” With the Cartesian Coordinates, Descartes showed that the x and y axis supported simple equations of straight lines, to more complex coordinates of equations with different exponents. For example y= x2+4 is a curve parabola. Descartes was more famously known as a philosopher giving his two sense in things and pursuing to uphold the truth.

He continued to keep adding to his collections of writing Meditations, Principia Philosophiae and others. In 1649, Queen Christina of Sweden invited Descartes to live in Stockholm to tutor her in philosophy and she insisted in working with him at 5 in the morning; which he was used. The early hours and the harsh weather affected his health and he died of pneumonia in early 1650. Besides his great deal of being dubbed “ the father of modern day philosophy” Descartes math contributions are value of us today.

His idea of the Cartesian coordinate is in our mathematical calculators and the coordinates are what we use in math in almost all grade levels. Without Descartes influence exponents wouldn’t have been as simple, and also being able to determine positive and negative real roots. Descartes believed everything can be related to math and that there was always an answer, even if it was imaginary numbers too. His contributions in all areas of studies helped shaped the modern studies. Rene Descartes was a brilliant man indeed. Works Cited

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