Blaise Pascal: A Great Mathematician And A Great Religious Philosopher

Did you know that Blaise Pascal was not only a great mathematician, but also a great religious philosopher, computer scientist, writer, and an inventor? Blaise Pascal is considered one of the most greatest mathematician influencer of all time because his inventions and ideas helped many people have a better understanding for mathematics. Some of his inventions and ideas that he made and thought of was the first machine calculator, Pascal's Triangle, and his experiments with dice which helped people have a better understand for probability. But these are not all the things that Blaise Pascal did as a great mathematician, he did many more things to improve the world and our everyday lives.

In the early years of Blaise Pascal's life, he lived with his father, Etienne Pascal, and his mother, Antoinette Begon. Pascal had two other siblings, one older than him and one younger than him, but he was the only boy. His father was a tax collector and a local judge in Paris at the time he was born. But then, when he was twelve, he and his family moved to Rouen, so his father could be the tax collector for the city of Rouen in France. Also, while Pascal was twelve, he started to go to and participate in mathematical events, he did this because his father didn't want to teach him more things about math because it would have increased his curiosity for mathematics at such a young age. But, while Pascal's father was trying to keep him away from mathematics just four years later, at age sixteen, Pascal completed a short project called "Essay on Conics" or best know as Mystic Hexagram. This project is about and deals with the geometry of the different cones such as the hyperbola, the parabola, and the ellipse, but there are different formulas for each of the different type of cone. Then, when Pascal was just simply nineteen he invented the calculating machine called, the Pascaline. He invented this Pascaline to help his father have less stressful calculations with the taxes that he did for all of the people of the city. The Pascaline worked really well and helped many people, but you could only add and subtract numbers at the time, but people soon found out that if you simply did repeat addition and subtraction you could also do multiplication and division by just using repeated numbers. You can use the machine by using the eight dials that added up to eight and then you use the base ten for hundreds. But, when the first dial moved ten notches it would cause the second dial to moved one notch to represent the tens column. Next, when the ten dial moved ten notches the third dial moved one notch to represent one hundred and then this process would repeat.

Another thing that Pascal discovered was his theory on probability. Probability is when something is more likely to happen than something else, for example if you have a coin the probability of it landing on tails would be ½. Pascal and another mathematician named, Pierre De Fermat started to write to each other about probability, and they soon discovered that they both came to similar conclusions about it before they even started to write to each other. But, Pascal also had many other theorems that he had published, but there was something different about his theorems compared to other mathematicians' theorems, he didn't use as much proof as them. He didn't use as much proof for the theorems as the other mathematicians because he had a better understanding of the mathematical subjects, therefore, he didn't need as much proof on them.

The next thing that Pascal helped invented was the Pascal Triangle. But Pascal wasn't the first person to work on this triangle because the Chinese and Islamic mathematicians used it also, but they used it almost five hundred years before him, and Pascal still gets the credit for it. He gets credit for the Pascal Triangle because he is the first one to have studied it extensively, he even made a book on it call, "Treatise on the Arithmetical Triangle." This book shows you how to use Pascal's triangle, for example, you can use it by picking any number in the table, and any of the numbers that you pick are equal to the sum of the numbers above it and on its left, but the first row and the first column is different because every number is equal to one.

After, Pascal invented many more inventions and thought of many more ideas, he eventually died on August 19, 1662, at just the age of 39. But, a few centuries later in 1970, a computer scientist named, Niklaus Wirth invented a programming language named after Pascal, called "Pascal." This programming language is supposed to encourage good programming and it is supposed to honor Pascal in his early contributions to computer science. In conclusion, this is just some of Pascal's inventions and ideas that helped improved people's everyday lives and helped to improve the world.