

“Mathematicians are People Too”: Mathematical History

“Who came up with this equation?!?” more than one algebra student has agonized while learning about the quadratic formula. While we often think of our mathematical ancestors less than favorably, they actually lived interesting lives and paved the way for our “easier” modern mathematics. Sure the quadratic formula can be tough, but solving quadratic equations without it is even tougher. These same mathematicians made technical and religious contributions as well—many at very young ages. There are hundreds of stories of faith, family, and discovery in the lives of the many men and women who have studied mathematics all over the world.

Archimedes, one of the greatest of all mathematicians, invented the catapult and laid many of the foundational principles for geometry and calculus. He was killed while working on a mathematics problem; he was so engrossed in his work that he ignored a soldier’s summons and was murdered for it.

Galileo Galilei was a great mathematician and scientist who helped to introduce the scientific method. He struggled with his obligations to his family (who wanted him to become a doctor and help support them) and his love for the study of mathematics. Gauss stuck with mathematics but deprived himself whenever possible to send money home.

Blaise Pascal saw the fatigue on his tax-administrator father’s face and created the first “arithmetic machine” to aid in his work. When he died of cancer at 39, Pascal left boxes and drawers full of slips of paper with ideas on them.

Sophie Lagrange was thirteen when her parents finally permitted her to study mathematics—only after their attempts to dissuade her by taking away her lamps and heat each night failed. She continued to study alone and, unofficially, with other mathematicians throughout her life and made significant contributions to the understanding of mathematics in architectural construction.

Carl Friedrich Gauss was a young student when he stumped his teacher by using series addition to find the sum of the numbers 1 to 100. He was also a perfectionist; upon Gauss’ death his secret diaries were discovered. They contained a wealth of theories that he had refused to publish until they were complete.

Maria Agnesi’s paper on the importance of higher education for women was published when she was nine years old. At the age of 30 her textbook *Foundations of Analysis* became the authoritative mathematics text for years to come.

Next month: “Mathematics in Unit Studies: Not just a workbook anymore.” Please e-mail us (Peter and Bethany Barnosky) with questions, comments, or topics for future columns: brb@webthunder.com. Thanks to *Mathematicians Are People, Too* by Luetta and Wilbert Reimer. [January 2002]