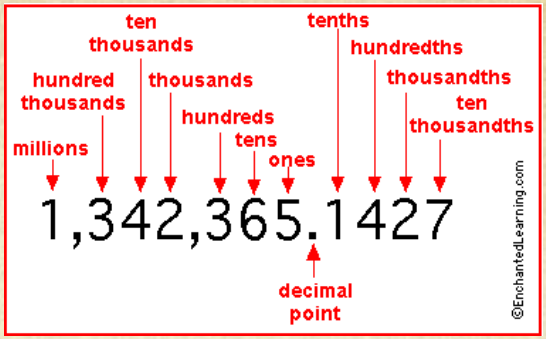
Mathematics in the making

By. Dakota Staton

Brahmagupta (589–668)



His invention for the Decimal system was unique but his text book "Brahmasphutasiddhanta" was very very influential and is sometimes the first text book.

This text book was the first to treat zero as a number and it also treated negative numbers as well.

His findings and studies

Brahmagupta was among the first to express equations with symbols rather than words. He made great advances in arithmetic, algebra, numeric analysis and geometry.

Several theorems speak his name some including the formula for the area of a cyclic quadrilateral.

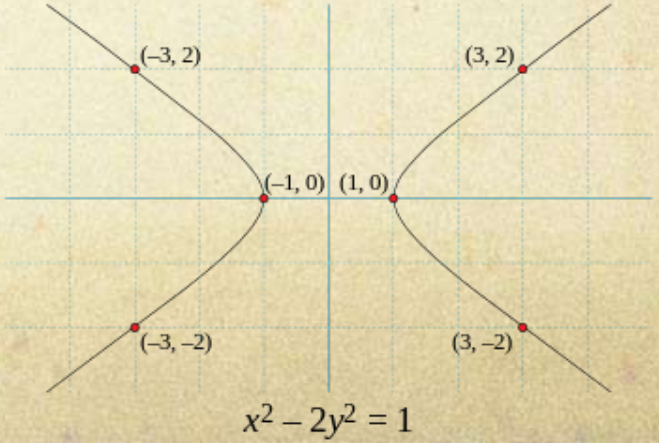
Greater knowledge

$16\ A^2 = (a+b+c-d)(a+b-c+d)(a-b+c+d)(-a+b+c+d)$

Another famous Brahmagupta theorem dealing with such quadrilaterals can be phrased "In a circle, if the chords AB and CD are perpendicular and intersect at E, then the line from E which bisects AC will be perpendicular to BD." Proving Brahmagupta theorems are good challenges even today.

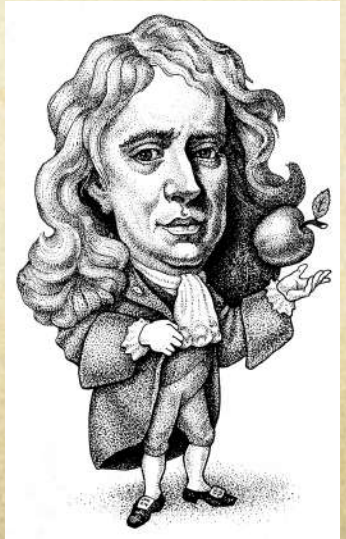
His final works

In addition to his famous writings on practical mathematics and his ingenious theorems of geometry, Brahmagupta solved the general quadratic equation, and worked on Diophantine and Pell's equations. His work on Pell's equations has been called brilliant and marvelous. He proved the Brahmagupta–Fibonacci Identity.



Isaac (sir) newton

At age 22 on his leave from the university is when his genius began in his advances in mathematics, Optics, dynamics, thermodynamics, acoustics, and celestial mechanics. He is famous for his three laws of motion but in those laws are physics based on math.

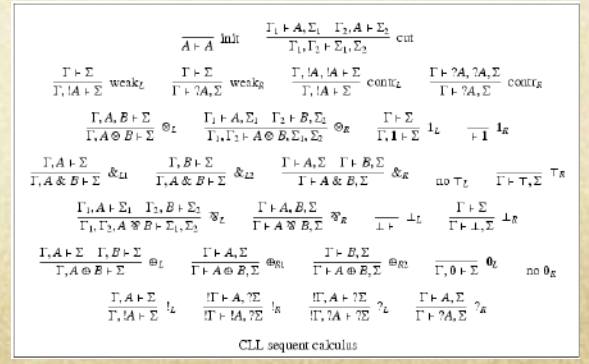


More about Isaac

Isaac newton's three laws of gravitation is what keeps the universe in orbit. His laws consisted of theory's on how the earth and everything in it keeps from moving into space. Others that has interested Newton was his intellectual interests in chemistry, theology, astrology, and alchemy.

His other interests

Although others developed the techniques independently, Newton is regarded as the father of Calculus. He called calculus “fluxions” she shared most of his credit and workings with Leibniz for the Fundamental Theorem of Calculus. He applied calculus to many different things like the length of a curve and areas.



More about Calculus

In addition to several other important advances in analytic geometry, his mathematical works include the Binomial Theorem, his eponymous numeric method, the idea of polar coordinates, and power series for exponential and trigonometric functions. His equation ($e^x = \sum x^k / k!$) has been called the Most important séries in mathmatics.

His finals…

Newton Ranks number 2 on Michael Harts famous list of the Most influential persons in history Whatever the criteria, Newton would certainly rank first on any list of physicists, or scientists in general, but some list makers would demote him slightly on a list of pure mathematicians: his emphasis was physics not mathematics, and the contribution of Leibniz (Newton's rival for the title *inventor of Calculus*)

Grace Marie Baries

Born in Canal Winchester Ohio. Received her A.B. degree from Heidelberg college, Tifton Ohio in 1897 She was a graduate student at Bryn Mawr College from 1897 to 1899 and also did graduate work at Columbia University From 1902 until 1906 she taught mathematics and science at Miss Rooney's School in Philadelphia, PA. She then became a graduate student at The Ohio State University, and in 1909 became the first person (male or female) to receive a Ph.D. in mathematics from The Ohio State University.

More about Grace

Her dissertation was on imprimitive substitution groups of degree sixteen" Abstract, written under the supervision of Harry W. Kuhn and published by the Lancaster Press, Lancaster, PA. Bareis became an assistant professor of mathematics at The Ohio State University in 1908. She taught at Ohio State until her retirement in 1946. However, she continued to teach for two years after her retirement because of the shortage of mathematics instructors to teach the returning veterans.

pictures

More pictures

Sources

http://www.agnesscott.edu/lriddle/women/bareis.htm

http://www.google.com/#hl=en&sclient=psy-ab&q=sir+isaac+newton&oq=Sir+(iss&gs_l=hp.1.0.0i22i10i30l4.2353.14757.0.16982.10.8.2.0.0.0.316.2086.0j1j6j1.8.0...0.0...1c.1.12.psy-ab.G4cBYhBwEMc&pbx=1&fp=1&biw=788&bih=873&safe=active&bav=on.2,or.r_qf.&cad=b

http://fabpedigree.com/james/mathmen.htm