Ramanujan – an Indian Prodigy
Born: Dec 22, 1887, Erode, Tamil Nadu, India. Died: April 26, 1920, India

Ramanujan came from a poor area in India and in November 1897 he passed his primary examinations in English, Tamil, geography and arithmetic, finishing first in the district. That year he entered Twon Higher Secondary School where he encountered formal mathematics for the first time. By age 11 he had passed the mathematical knowledge of two college students who were borders at his house, and he was lent a book on advanced trigonometry. He completely mastered this book by 13 and was discovering sophisticated theorems on his own. When he was 16 he came across the book ***A Synopsis of Elementary Results in Pure and Applied Mathematics*** by George S. Carr. This book was a collection of 5 000 theorems and by the next year he independently developed Bernoulli numbers and had calculated Euler's constant up to 15 decimal places.

After leaving Town High in 1904, Ramanujan continued to try to get into higher colleges, but failed exams on subjects other than mathematics. He lived in extreme poverty and was often near the point of starvation. Eventually his work came to the attention of the British mathematician G. H. Hardy, who eventually persuaded him to come to work in England. He arrived on April 14, 1914. Although they had different personalities and religious beliefs, Ramanujan and Hardy worked together for 5 years. Ramanujan was a awarded a BA degree, later upgraded to a PhD in March 1916. On December 6, 1917 he was elected to the London Mathematical Society.

Ramanujan was plagued by ill health and returned to India in 1919 died soon after at the age of 32. One anecdote that I have heard that always makes me aware of the genius of these mathematicians is that Hardy was traveling by taxi cab to visit Ramanujan while he was in hospital. On arriving by his bedside he remarked that the taxicab had the number 1729 and Hardy said, "I'm sorry, but I could find nothing interesting about this number". To which Ramanujan replied, "Oh, it is a fine number, for it is the smallest number that can be written as the sum of two different cubes in two different ways!"

Indeed $1\ 729 = 1\ 000 + 729 = 10^3 + 7^3$ and $1\ 729 = 1\ 728 + 1 = 12^3 + 1^3$

I have remembered this story for over 20 years since I first heard it. Most of this information I have gathered throughout my years of teaching Math from a variety of different sources, however, for this post I have relied on Wikipedia as it seems to have gathered a lot of his life in one place.