# Ramanujan

1887 - 1920

Srinivasa Ramanujan was an incredible mathematician, not just for his almost unpronounceable name, but also for the fact that he made some of the most amazing discoveries ever. He was so far ahead of his time, and his work so unorthodox, that no one really understood him. It is only 80 years after his death that we are starting to make use of his work in computing and complicated physics.

He was persuaded to come to England by a fellow mathematician, G. H. Hardy. Ramanujan left his wife behind, cut off his hair and threw away his turban. Drastic actions some might say, but a bigger problem was the fact that he refused to wear shoes or socks. English weather is, as we know, rather miserable and soon Srinivasa caught a nasty cold. He never really got over it, and it eventually led to his death in 1920.

But this was not before Ramanujan had demonstrated his incredible skills to the mathematicians at Cambridge University. First he had made a name for himself as something of a nutcase; He did his maths lying face down in a cot while working on a slate, rather than paper. He would rub out all his workings with his elbow leaving just the solutions. This infuriated the Cambridge mathematicians because they never knew how he had solved the problems he worked on. It would infuriate maths teachers today too.

Hardy told the most well-known example of Ramanujan’s brilliance after visiting him on his deathbed. He didn’t know what to say to cheer him up, so Hardy commented on the boring number of his taxi – 1729. Ramanunjan was instantly inspired, sat up and said,

‘*But no Hardy, not at all. 1729 is a fascinating number! It is the smallest number that can be expressed as the sum of two cubes in two different ways!*’

Can you see what he meant, and can you find the cube numbers that solve this problem?