



© 1997–2004, Millennium Mathematics Project, University of Cambridge.

Permission is granted to print and copy this page on paper for non-commercial use. For other uses, including electronic redistribution, please contact us.

---

September 2004

Issue 31

## features...

Why do so many people say they hate mathematics, asks **David Acheson**? The truth, he says, is that most of them have never been anywhere near it, and that mathematicians could do more to change this perception – perhaps by emphasising the element of surprise that so often accompanies mathematics at its best.



### Why is the violin so hard to play?

As anyone starting out knows, the violin is a difficult instrument. It takes time before the novice player can expect to produce a musical note at the desired pitch, instead of a whistle, screech or graunch. **Jim Woodhouse** and **Paul Galluzzo** explain why.



### Remembrance of numbers past

Memory is fundamental to the way we think, and we use it in almost every activity. But most of us cannot imagine approaching the level of world record holder Hiroyuki Goto, who memorised and recited 42,195 digits of pi! **Rob Eastaway** asks if mere mortals can learn anything useful from such incredible feats of memory, and gives some hints on how to remember numbers.



Coincidence, correlation and chance

How much evidence would you need before buying into a get rich quick scheme? Do high ice cream sales cause shark attacks? And just how likely was it that you were ever born? **Andrew Stickland** finds out that, when it comes to probability, our instincts can lead us seriously astray.



Career interview: Freelance IT consultant

**Jason Winborn** specialises in human resource management software Peoplesoft, and has been working freelance as a consultant for four years.



*Plus* is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.