

From the Editor

Mathematics, with love

Most of our readers will not need to be reminded of the use of mathematics in many areas of life, such as science, commerce, medicine, you name it. But winning a partner? You must be joking! I kid you not! *Mathematics with Love* is the story of Barnes Wallis, later Sir Barnes Wallis, and his attempts to woo Molly Bloxam. It was the 1920s — no email nor texting, and people didn't phone. It was the age of letter-writing. At the time, Wallis was working on the development of an airship, and Molly was a student struggling with basic mathematics. Wallis was twice Molly's age. It was an age of parental authority, and Mr Bloxam was against the match. But they were allowed to write to each other. This book is their correspondence over two years. A large part of the earlier letters describe Wallis' attempts to teach Molly the rudiments of trigonometry and calculus. He put many hours into the task — a labour of love! He wrote later that he rarely put less than 10 or 12 hours a week into writing to Molly. And it worked! On her 20th birthday, Molly was allowed to say 'yes'.

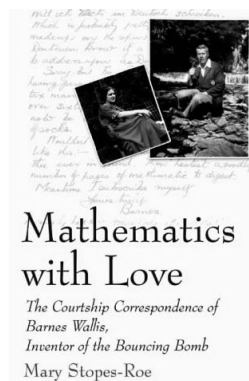
Today's readers may well be bemused by the effort that they put into letter-writing. They were oh so polite to each other! In the later letters mathematics disappears altogether. Some readers may find Wallis' expressions of his love pall somewhat at this stage.

After fatal crashes, the airship that Wallis helped to design was scrapped. But he achieved lasting fame through his design of the bouncing bomb that was used to blow up dams in the Second World War, immortalized in the film *The Dam Busters*. He was voted one of the BBC's Great Britons in 2002. Barnes and Molly were happily married for more than 50 years. And their coming together was aided by mathematics!

I cannot say from this correspondence that I would have liked to have been taught mathematics by Wallis! One last question: How would you explain trigonometry and calculus to your intended?

Reference

- 1 M. Stopes-Roe, *Mathematics with Love* (Macmillan, New York, 2005).



For something completely different, a reader, James Whiteman, has sent in a problem he saw on the *Mind Bending Puzzles Calendar*, by C. Pickover.

Captain Kirk's starship leaves Earth for Mars at the same time as Captain Eck's starship leaves Mars for Earth. Each ship travels at a constant speed, but one is faster than the other. After meeting and passing, Kirk requires $22\frac{1}{2}$ hours to reach Mars, while Eck requires only 10 hours to reach Earth. Assuming stationary planets, what total time did each starship require for its interplanetary journey?

I was invigilating an exam recently – no the most exciting of occupations – and spotted this question on a maths paper.

An old invoice showed that 72 identical office chairs had been purchased for £ * 557.7*, the first and last digits being illegible. What was the cost of one office chair? (There was no discount for bulk orders.)

More interesting than the usual run of exam questions!