26^2 is the first palindromic square of a non-palindromic number
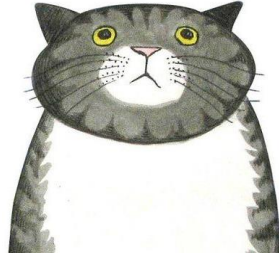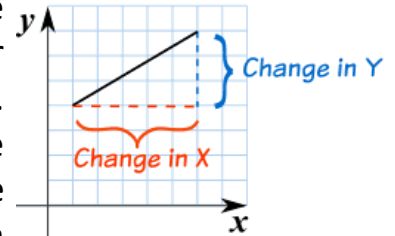
News

I don't know why Mog is looking so sad because we've had our MOG results[1] and five of our girls have achieved a distinction. They are Emma Eaton, Kate Pham, I-J Barry, Annie Seaward and Jess Marshall. Four girls[2] have also done well enough in the Senior Maths Challenge to qualify for the Senior Kangaroo, which takes place on 2nd December. Good luck to them!

Team Challenge

Our sixth form maths team finished in second place on Wednesday 23rd November at Solihull Sixth Form College, which unfortunately means we don't get to go to the finals in London. However, it also means we don't have all the hassle of having to go to London at six in the morning, which more than makes up for the disappointment of not winning.

Jess Marshall, Amrit Phull, I-J Barry and Kate Pham

Maths Word

A 'gradient' is a way of describing how steep a straight line is by using a number. The steeper the line, the bigger the gradient is. You can find the gradient of a line by drawing a right-angled triangle underneath the line and then calculating the 'change in y' divided by the 'change in x'. The equation of a straight line is often given in the form $y = mx + c$, where m is the gradient. Nobody is really sure of the reason why the gradient is called m, rather than g, but mathematician John Conway thinks it might be because the gradient of a sloping line has sometimes been called the 'modulus' of the slope.

Puzzle

A calendar contains two cubes, which are used for displaying the date, during any given month. It doesn't matter which cube is on the left and which one is on the right.[3] But, as with most things, there's a maths puzzle here.

Can you work out what numbers need to go on each cube to make this work?

1. MOG is short for 'Maths Olympiad for Girls', which probably should be MOFG, but that's harder to say.
2. These are Jess Marshall, Helena Watson, Kate Pham and Emma Eaton.
3. We're sure you've probably seen one of these. They're not rare.

Maths Fail

This is what happens when you don't work hard in maths…

If you see any other interesting maths errors, please let us know.

Advertisement

Or, alternatively, why not come to maths workshop, every Monday lunchtime, in room 13 ☺

4. Ambigrams were made famous by mainly two artists, John Langdon and Scott Kim.

Puzzle

Here's a neat puzzle from Alex Bellos's new book. Which of these shapes is the odd one out and why?

Ambigrams

An ambigram is a word or phrase that has been written so that it can be read in more than one way[4]. Sometimes this involves having more than one meaning, but more often it is just a word or phrase that has been written so that it has either reflection or rotation symmetry. Here are a few examples.

Why not try to create your own ambigram? You could use your name, or any other word or phrase you like the look of. Let us know if you create anything interesting.