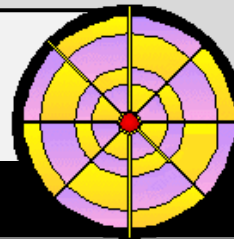


# The Daily Rigour

Sun 28<sup>th</sup> March 2021

Issue No. 241



Your free weekly numeracy newspaper!

## Teacher orders calculators from Morrisons - gets 7 chicken and bacon pasta bakes instead!

When it comes to online shopping from a supermarket, it's always a little bit of a risk as you can never be 100% sure they'll have your item in stock as a maths teacher from Wakefield has recently found out.

She recently bought seven calculators (priced at £2.50 each) from Morrisons as part of an online shop.

Imagine her surprise when she received seven pasta bakes (also priced at £2.50 each) instead!

- What is the total cost of the seven calculators?
- What should have been the cost of the seven pasta bakes?



## New Alan Turing £50 note design is revealed

The design of the Bank of England's new £50 note, featuring Alan Turing, has been revealed. The banknote will enter circulation on the 23<sup>rd</sup> of June, which would have been the his birthday. Mr. Turing is best known for his work was in helping the Allies to read German Naval messages enciphered with the Enigma machine. But less celebrated is the pivotal role he played in the development of early computers and, as a result, the ticker tape on the £50 note depicts Alan Turing's birth date in binary code.

### Changing between binary and regular numbers

Binary is a number system based on the powers of 2 where each number is made up of only 0's and 1's. See the example to see how it works →

Can you work out what these binary numbers are as ordinary numbers? TIP: Line the number to the right of the table to help you do this.

- 110
- 10111
- 11101111000 (HINT: Extend the table!)

1	1	1	1	1	1	1	1	1
2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>	
128	64	32	16	8	4	2	1	
So 11111111 in binary is equal to 256.								



## Tony Hawk breaks down in tears after landing iconic 'ollie 540' for last ever time

Skateboarding legend Tony Hawk broke down in tears after landing the trick he made famous for the last ever time.



The American says he started trying the incredibly tough ollie 540s "as a joke" back in 1989, but finally mastered the move.

However at age 52 - and with wear and tear on his body - Hawk has decided to retire the move.

The ollie 540 move means the skateboard has to stay on the skater's feet for a certain number of spins in the air.

How many spins in the air need to be completed in order to pull off an ollie 540?

(HINT! Think how many degrees are in a full turn)

## Dominic Calvert-Lewin jokingly likens his shin pads to CUSTARD CREAMS

Dominic Calvert-Lewin joined in with those laughing at the shin pads he wore against San Marino, amusingly joking on Twitter he had stuffed custard creams down his socks.



Custard cream biscuits are a very popular snack in the United Kingdom and Republic of Ireland.

In a recent poll of 7000 Britons, 90% voted custard creams to be their favourite biscuit.

How many Britons in the survey voted custard creams to be their favourite biscuit?