



MATHS

MASTERCCLASS

JUNE 2015

WITH PLYMOUTH UNIVERSITY

The **enchanting charms** of this sublime science reveal only to those who have the courage to go deeply into it.

-**Carl Friedrich Gauss**



04/22/2014 01:38

Some of our year 6 talented mathematicians were chosen to represent the school for a maths masterclass at Plymouth University on Monday 15th June 2015

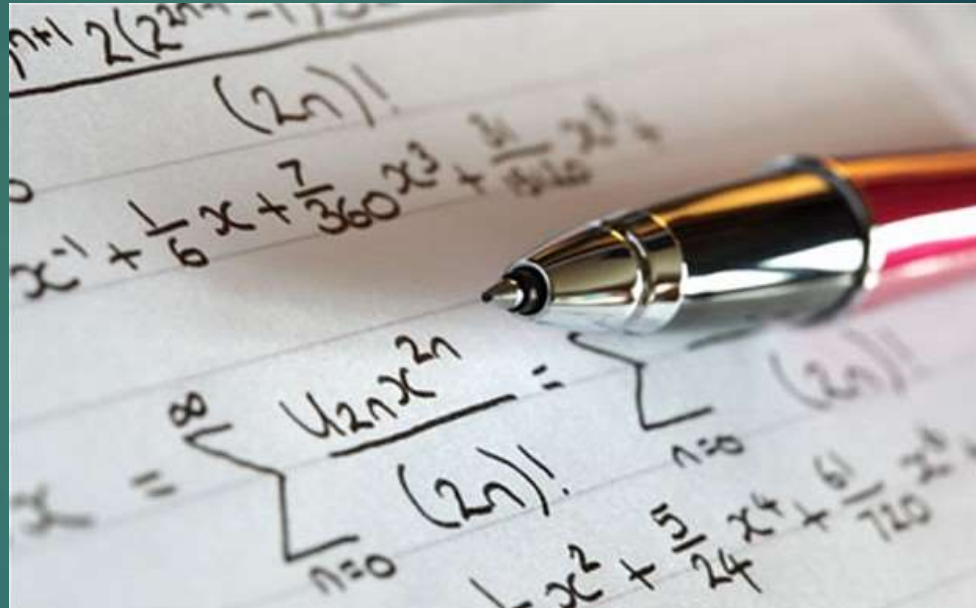
Ryan Bishop

Brandon Bulley

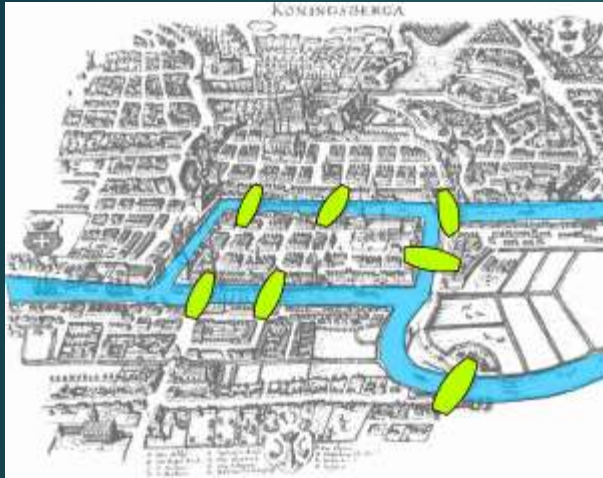
Keanu West

Shauna Davies

Leo Warry



THE SEVEN BRIDGES OF KONIGSBERG



Our first session was based on this historically notable problem in mathematics. The problem was to devise a walk through the city that would cross each bridge once and only once.

We were then presented with a series of networks to calculate how many pencil strokes it would take to cross every arc within a shape once and once only.



Networks.

A)



(1)



(2)



(3)

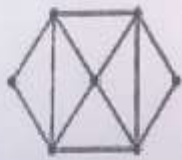


(4)

B)



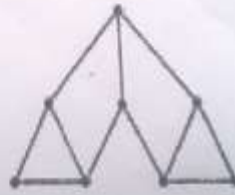
(1)



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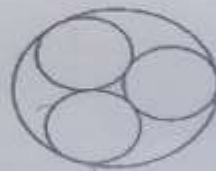
C)



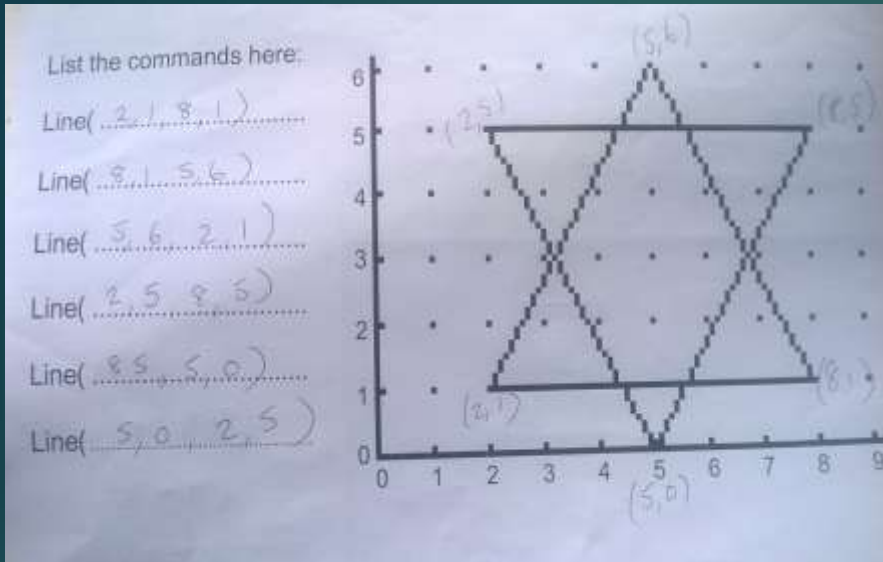
(1)



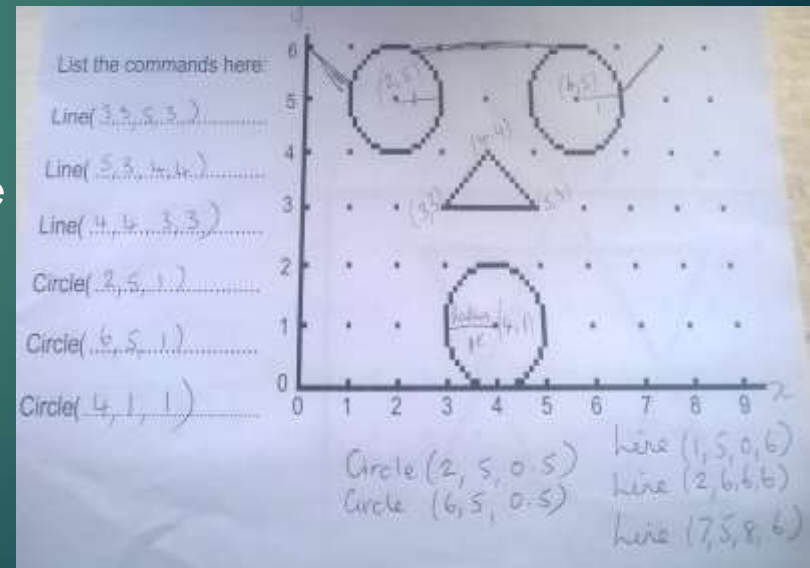
(2)



(3)



Our second session involved programming graphic calculators. In this session we were able to demonstrate our knowledge of plotting co-ordinates.



For our third session we expanded on our knowledge of calculating probabilities by presenting them as decimals/fractions. This proved quite challenging but the tutor made it a fun lesson, enjoyed by all.



Leo, Shauna and Keanu calculating theoretical probabilities.

What did we learn/enjoy?

- I learnt about theoretical probabilities. I really enjoyed the whole experience because I have learnt so much. The graphic calculator was great as it tested your memory and made you creative. The free kit-kat was also enjoyable – **Keanu West 6p**
- I learnt how to program a graphic calculator. I have used one before but now I know how to do circles on them. I really enjoyed mixing with the other schools and am proud of myself for volunteering to go to the front of the lecture hall to participate in a challenge with two girls from other schools – **Shauna Davies 6s**
- I learnt that $n+r = a+2$ (nodes of a net + regions = Arcs + 2). I enjoyed all the maths experiments and, of course, the kit-kat and drink provided, thank you – **Leo Warry 6s**
- I enjoyed working with Tom, he was really friendly and made the session fun. I learnt a new way of writing recurring numbers. Instead of 3.3333333 you can just put 3.3 with a dot above the second 3 – **Brandon Bulley 6s**
- I learnt, even though I found it hard at first, to convert tricky fractions into decimals – **Jamile Mufford 6s**
- I learnt how to trace a shape using just one pencil stroke and really enjoyed using the graphic calculator to make faces with mathematical shapes – **Ryan Bishop 6p**