



Mathematics

# St Ninian's Mathematics Department Newsletter

Issue 3: 06/03/2017

<https://blogs.glowscotland.org.uk/er/StNinians/> @StNiniansMaths/@MrCookeMaths

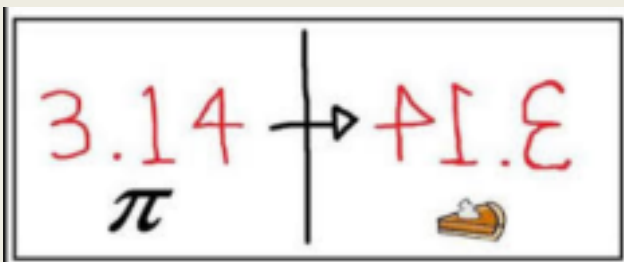
## Welcome

It's March already and the pressure is building inside and outside of the department. Well done to all 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> years on sitting their recent prelims. Let's hope the results achieved can inspire you for bigger things come May/June.

March is an interesting month for mathematics. So interesting in fact that the famous pi day falls every 14<sup>th</sup> March. (Albeit them Americans have the month the wrong way, but us mathematicians aren't complaining.)

Pi day is celebrated on March 14 at the Exploratorium in San Francisco at 1:59 a.m. PST which is 3.14159.

Another amazing fact is that  $\pi$  and P are both the 16<sup>th</sup> letter in their respected alphabets. AND!!! Did you know that PIE backwards is 3.14.... MIND BLOWN

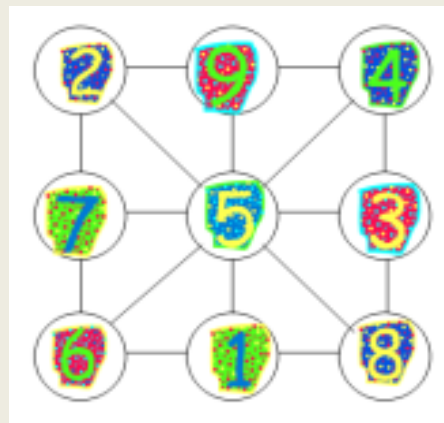


***I used to think maths  
was useless. But  
then one day I  
realised decimals  
have a point.***

## Mrs Robison's Puzzle

### GOING ROUND IN CIRCLES

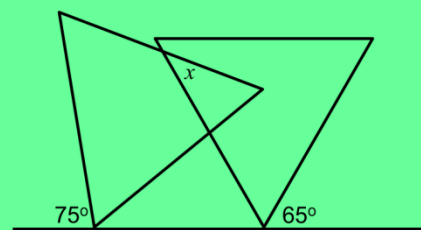
Well done everyone for attempting last month's puzzle. Below is the solution to the befuddling enigma of trying to make all lines equal 15.



This month's puzzle comes in the form of a previous question used in the UK Maths Challenge. All teachers have been using these style of questions in starters and in class tasks to raise the bar in terms of how student's think and analyse about problems.

Have a go if you think you are clever enough!

The diagram shows two equilateral triangles.  
Find the size of angle x



Please hand in all solutions on an A4 page and give to Mrs Robison or Mr Cooke by the end of the month.

## Maths in the movies

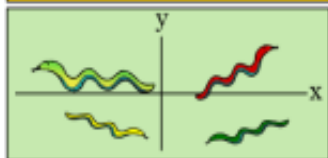


Last month saw the release of a new film called 'Hidden Figures'. You may not know of these 3 women, but you will have definitely have heard about the mission they worked on behind the scenes. This movie tells the story of a team of African-American women mathematicians who served a vital role in NASA during the early years of the US space program.

Hidden Figures, from Margot Lee Shetterly's book on this true story, follows a team of African American female mathematicians that helped Nasa's space program put John Glenn into orbit. Have a go and watch the film! Try and spot any maths you can see in the movie and talk it over with your maths teacher.

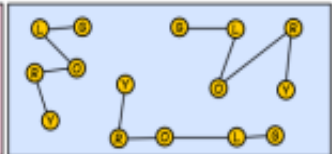
## Maths Movie Quiz

CAN YOU FIGURE OUT THESE MOVIE TITLES?



$$P(\text{Monday} \cap \text{Tuesday}) \\ = P(\text{Monday})P(\text{Tuesday})$$

$$\frac{1}{n} \sum_{i=1}^n \text{[smiley face icon]}_i$$



12.874752 km

$$\begin{bmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{bmatrix}$$

$\mathbb{D} = \{d : d \text{ is a dream}\}$   
 $\mathbb{D}$  HAS TWO OPERATIONS, NAMELY ADDITION AND MULTIPLICATION, SATISFYING THE CONDITIONS THAT MULTIPLICATION IS DISTRIBUTIVE OVER ADDITION, THAT THE SET IS A GROUP UNDER ADDITION, AND THAT THE ELEMENTS WITH THE EXCEPTION OF THE ADDITIVE IDENTIFY FORM A GROUP UNDER MULTIPLICATION.

$\alpha \wedge \omega$

All this talk about maths and movies got me in the mood for a quiz. This quiz was developed by Spiked Math and even more quizzes can be found here. <http://spikedmath.com/403.html>. We managed to get the first movie as the infamous Samuel L Jackson movie 'Snakes on a plane' but we are struggling with the rest. Try them for yourselves and give your answers in to any teacher in the maths department!!

## Supported Study

Reminder to all pupils of the following times for supported study. Make sure to use this resource to your advantage. Easter school is also around the corner, get involved and ensure you get the best grade possible!!

Supported study is still being held for all exam classes for the remainder of the year. Please take advantage of this class as often as possible

Monday: National 5 mathematics

Wednesday: Higher mathematics

Thursday: Higher mathematics/ S1-S3 homework club

## Other business

Congratulations to all S1 and S2 pupils who won the pupil of the month award for Dedication! A full list of winners can be found on the wall display outside the maths base next week.

Also, a big well done has to go out to all our representatives who took part in this year's UK maths challenge. Special mention to Aidan Lao, Lily Collins and Michael Doyle who achieved the best in year! A full list of winners can be found on the St Ninian's website.

<https://blogs.glowscotland.org.uk/er/SNHMathematics/Website/2017/02/16/uk-maths-challenge-results/>

## Get involved

Got something you think will interest the mathematics department? Don't hesitate to contact **Mr Cooke** to have a feature in next month's newsletter.