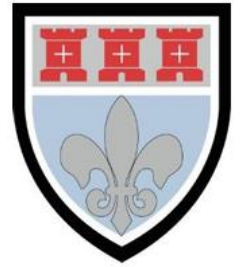


# St Mary's Catholic School



Number  
Algebra  
Data  
Chance  
Geometry  
Measurement  
Calculus  
Topology  
Arithmetic  
Space  
Statistics

## Y11 – 12 Transition

If you are thinking of studying A-Level Maths, you should be commended for your astute decision making.

However A-level Maths and A-level Further Maths don't have the reputation for being some of the hardest A-Levels for nothing.

What can you do to ensure the best possible start to the course?

Well, it's pretty easy really - don't forget everything you studied for GCSE Maths, especially the Algebra.

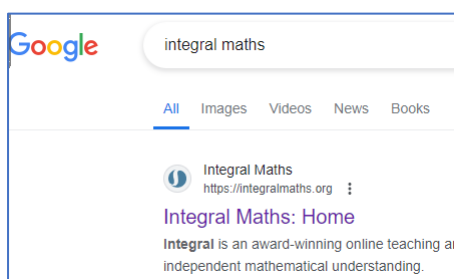
This booklet contains work that you will be expected to complete and hand in, along with additional ideas on where to go to keep your maths skills up to scratch over the Summer break

# Summer Work

These tasks must be completed **in full** before the start of September:

1. Work through the seven sections of the “Transition to A Level Mathematics” course on Integral.
  - Watch videos and work through tasks in each section
  - Complete the online Topic Assessment for each section
  - *The “Go Deeper” tasks that appear on completion of the Topic Assessment are optional, unless you are also taking Further Maths*
2. Complete the “Start of Year 12 Knowledge Check” online assessment on Integral

Further details below



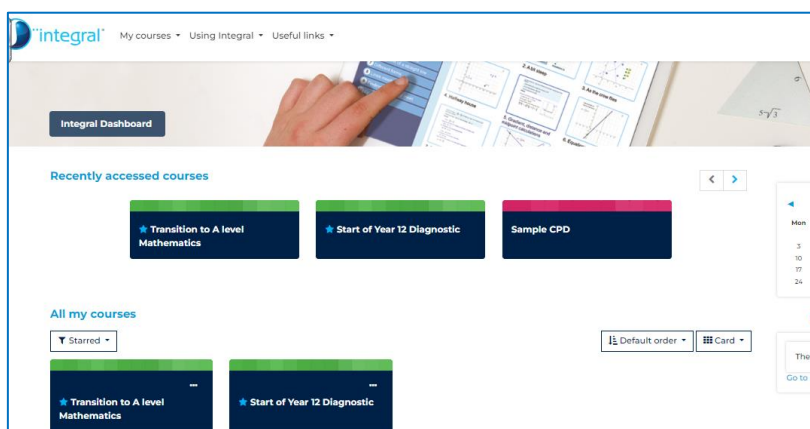
Search for “Integral Maths” in Google.

*1349AL- first initial of your first name, followed by your surname*

Log in using the following credentials:  
(you will be prompted to change your password the first time you log in)

A screenshot of a login form. The username field contains "1349AL-jbloggs" and the password field contains "changeme". An arrow points from the text "1349AL- first initial of your first name, followed by your surname" to the username field.

You will have two courses on your dashboard: “Transition to A Level Mathematics” (**Task 1**) and “Start of Year 12 Diagnostic” (**Task 2**)



Select the relevant course and follow the on-screen instructions.

Once you have completed the “Transition to A Level Mathematics” in full, you should download the certificate – you will be asked to upload a pdf of this to a Teams assignment in the first week of term.

The Diagnostic Test score will be sent electronically to your teacher and no printing is required.

# There are many other ways you can keep your maths skills sharp, in addition to traditional revision;

## Try the free Sumaze apps

Number and logic problems in a maze-style game. If you have a lot of free time Sumaze 1 can be done in under two days



## Investigate YouTube

Look for the Numberphile channel or videos by the 'Festival of the Spoken' nerd team

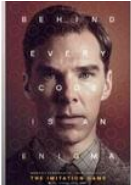
## Read a review and watch a film

'Hidden Figures' PG

'Beautiful Mind' 12

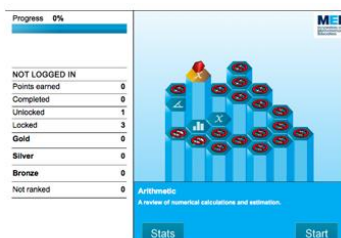
'The Imitation Game' 12

You'll be surprised how many results you get if you Google 'maths films on Netflix', however they aren't all available on the UK service

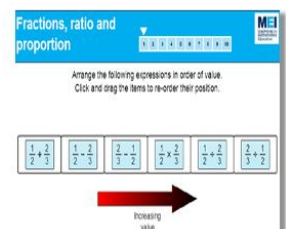


## Go to an event

If you get the opportunity to, go to a popular Maths or Science lecture. You'll be surprised where they pop up - even the famous Hay Literary festival has a maths lecture! Don't worry if you don't understand all of it, you won't be alone, but you'll start to see the links between different areas



**Try "Bridge It" by MEI**  
An online, flash-based quiz game to support preparation for PostGCSE maths. Google "Bridge It MEI"



## Read a book and follow the authors on social media

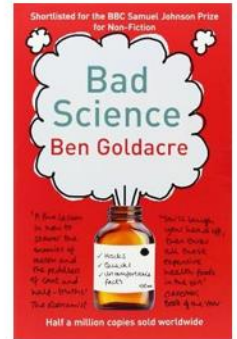
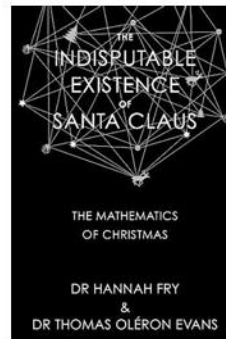
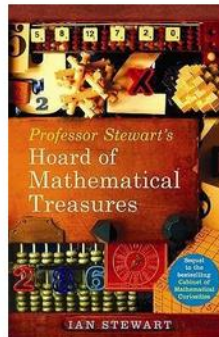
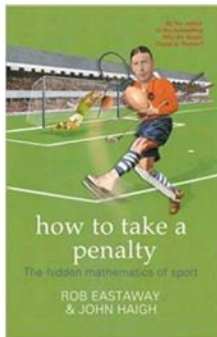
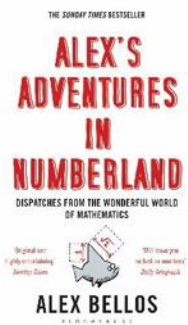
'Alex's Adventures in Numberland' by Alex Bellos

'Bad Science' by Ben Goldacre

'Professor Stewart's hoard of mathematical treasures' by Ian Stewart (one of many titles)

'The indisputable existence of Santa Claus: The mathematics of Christmas' by Dr Hannah Fry & Dr Thomas Oleron Evans

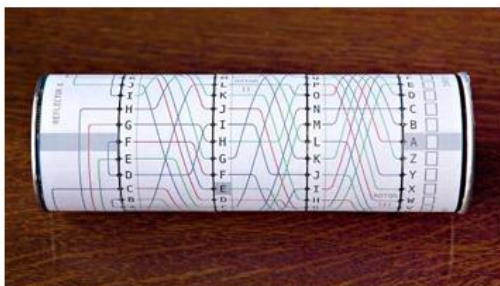
Anything by Rob Eastaway or Danica McKellar



## Puzzles

Invest in some Maths related puzzle books: Sudoku, mathdoku, menseki meiro (books are in other languages, but you don't need the instructions, just the pictures), logic problems

They'll all keep your brain alert



## Eat some tubes of Pringles with friends

- Then Google Pringles Enigma machine
- Make enigma machines out of the tubes
- Text each other coded messages whilst sunbathing (in the rain)

**We look forward to seeing you in September!**