

When studying mathematics, it is important that you not only attend all of your lessons and complete all of your homework, but that you are also doing independent study. We would recommend that you are spending at least 5 hours a week on your independent study. In order for this study to be of maximum benefit it is important that you do a range of different activities; you should be doing some from each of the boxes below. In addition, if you would like to stretch yourself beyond the A-level curriculum then have a look in the super-curricular box for ideas.

Content

One important part of independent study is making sure you have learnt all of the content; below are some suggestions of things you can do to help learn the content in A-level mathematics:

- ✓ Creating mind maps
- ✓ Creating summary sheets
- ✓ Create flash cards
- ✓ Get someone else to test you (using your flash cards, class notes, Book of Power, or the textbook)
- ✓ Making/remaking class notes
- ✓ Highlighting/ colour-coding your notes
- ✓ Using a revision wall to display your learning
- ✓ Completing textbook exercises (you must complete maths questions, just reading through will not be enough)
- ✓ Using resources in your textbook, on Integral and any resources your teachers direct you to
- Reading key examples and notes from your textbook or Integral and summarising what you've read

Skills

Another important part of independent study is developing the skills to be able to succeed in the exams. Below are some suggestions to help you develop those skills:

- ✓ Writing exam answers under timed conditions
- ✓ Using the 'Topic Assessment' and Level 2 or higher Integral section resources to practise exam-level questions on specific topics
- ✓ Completing section tests from Integral
- Reviewing model answers after writing your own
- ✓ Buying one of the revision workbooks and

Feedback

The final important part of independent study is getting and using feedback. Feedback allows you to understand what it is you need to do differently next time in order to improve. Below are some ideas about how you can use feedback:

- Marking your own work using a markscheme
- ✓ Studying markschemes or examiners reports
- ✓ Working with other students in groups/pairs
- Comparing model answers against your own work (layout and communication are important!)
- Emailing your teachers for feedback on specific questions (include a photo)

Super-curricular mathematics

If you were considering studying mathematics at university, or just really interested in the subject, then you could complete some super-curricular activities. These are things which go beyond what is covered in the curriculum and includes things such as watching relevant documentaries, listening to mathematics podcasts, reading relevant journal articles and reading relevant books. There are problem solving clubs and enrichment competitions run within the school to join too.

For up to date ideas look at the Mathematics Padlet CSF super-curricular: Mathematics A-level (padlet.com)