- 1. Before you start revising, get all your notes sorted, and draw up a list of all the topics you need to cover. This serves two purposes: you will definitely cover everything you need to cover, and a bit of tidying and sorting out is a nice relaxing way to ease yourself into the revision process.
- 2. Plan exactly when you are going to revise, and be strict with yourself. Don't just wake up one Saturday and say that you are going to be revising all day, because you probably won't get a lot done. Say that you will work from 10 until 11, then take a half hour break, then work until 12.30, then have some nice lunch, then do another hour, then go for a walk, and so on. If you are only revising in small chunks, and if you know the next break is just around the corner, your revision it likely to be much more focused and effective.
- 3. Give yourself little treats and things to look forward to. If you do a good day of revision, take the night off, watch some telly, go and see your friends, put all thoughts of maths and college to the back of your mind. Buy yourself some chocolate (or other favouritetreat!), but only let yourself eat it once you have achieved what you need to do.
- 4. Don't just read through the textbook! The only way to revise maths is to do maths. You will do much better spending 20 minutes doing maths questions than spending two hours just reading a textbook. The more questions you do yourself, the more you will get right, the higher your confidence will be, the more you will enjoy your revision, and the better you will do in the exam.
- 5. Use the Woodhouse Maths & Further Maths HOMEPAGE it has links to the maths YouTube site, MEI, MyMaths and all the past papers and answers – and much more. There are other websites that can set you questions and mark them for you, take you through step-by-step how to tackle certain topics, and use fancy illustrations and animations that might just make that really annoying topic finally make sense.

There are free video and audio podcasts in addition to the ones made by Woodhouse staff, that you can watch on your computer (or even on your iPods), which is like having a maths lesson in the comfort of your own bedroom, or in the park, or wherever you choose. They can be started, paused, and watched as many times as you like until you have got it.

6. Don't just practice the topics you can do. If you are really good at differentiation, for example, it is very tempting to keep doing lots of differentiation questions and then smiling as you keep getting them right. But unfortunately the exam is probably not going to have more than one or two differentiation questions. Although it can be painful, work your way through the topics that you struggle with, because it is much better to struggle on them at home, when you have time on your side and the answers available, than it is to struggle in the exam.



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- **7. Make sure you ask for help.** Again, once you are in the exam you are on your own, but during revision you are certainly not. If you are stuck on a topic or a question, then ask one of the people from your class, or your teacher, or someone at home, or look on the internet, or use something like the <u>Ask Nrich Forum</u>, where you can ask maths questions and get really good answers very quickly. Don't suffer alone! *But* -
- **8.** Don't ask for help too soon! Stick with it, try one thing or another, then try it again in case you made a simple error. See if you can find a similar example. Sleep on it and try it the next day. If you can resolve it yourself, you will really remember it next time!
- **9. Practice doing questions under exam conditions.** Get someone to pick you a set of questions (past paper questions from the homepage work well), or questions from your textbooks, or get some from a maths website, and try doing them in silence, with no help, for a fixed amount of time. This will get you used to what it will be like in the exam, how fast you need to go, and is the best way of checking that you really understand a topic. (it's roughly a minute and a quarter per mark, based on having 90 minutes to gain 72 marks, but some marks can be gained in seconds, where others take quite a bit longer).
- **10. Practise using your calculator!** Make sure you can switch from degrees to radians and back again and that you can use your statistical mode fully. Know how to turn on the frequency column (shift mode down on the cursor stat frequency on). Know how to use the equation solver and other buttons to check numerical answers (integration, differentiation, sums of series).
- 11. If it works for you, try revising with a friend for a bit of the time. You will find that one of you understands one topic more, whilst the other is a bit of an expert on another. Just by explaining things to a friend, you will find that your understanding increases, and likewise you might learn a different way of thinking about and understanding a topic. Mentoring is a good use of time for this reason, especially (but not only) for upper sixth students who are retaking AS modules.
- **12. Most important of all, try not to worry.** A little worry is not a bad thing as it keeps you focused, but revision certainly shouldn't be a stressful time. It should be a time where your brain gets chance to sort all the information it has been bombarded with and make sense of everything. If you follow the tips above, especially about getting yourself a revision schedule and always asking for help, you should find that revising for maths (or any other exam) is not that painful after all.

With *huge thanks* to <u>Mr Barton</u> from whom the majority of this excellent advice was stolen!