

STUDYSmarter Survival Guide

MYTHS ABOUT MATHS AT UNI



"You have to be a genius to succeed at tertiary maths."

Not true - even if you struggled with maths at school. Why? Well, things will be different now:

- High school focussed on key methods used in maths and introduced the thinking and investigation skills you will need. University maths focuses much more on the latter.
- At Uni you get to control how you study (called independent learning).

So, knowing methods and formulas is still useful but you also need some *creativity*, *imagination* and a willingness to *engage with ideas* (just like all your other units). If you work hard, seek advice when you need it and take control of your studies, you can succeed at maths.



"Maths isn't important for the job I want to get."

Well, you may not use much of the content of your maths units but the *process* of studying maths enhances your ability to *examine situations*, *analyse problems* and *propose effective solutions*.

These are all amongst the key skills that employers look for in potential employees so your performance now may well be a key factor in your future career!

It's also worth knowing that mathematics is becoming more important in the modern world but less visible in our daily lives. Remember, behind every smartphone app is a computer programmer using maths.



"Maths is boring."

Sure, adding up numbers and stuffing them into formulas is very boring. But this is not what maths is about!

Maths is a collection of intuitive ideas which have been building for thousands of years. Every new idea in maths pushes the world forward somehow. This is most evident in technology, where maths gives us powerful ways of storing and encrypting information.

Boredom can be a sign that you haven't developed an *understanding* of the maths concepts yet and are relying on meomorizing processes and formulas.



"You only get marks for correct final answers."

Marks in maths assignments, tests and exams are also awarded for the *steps* you take towards a solution, so you can earn some marks even if the final answer is wrong or you don't finish.



"Maths can only be done by working intensely until a problem is solved."

Like most challenging tasks, stopping and coming back later is often a good idea. It allows you time to process information or relax from the frustration of being stuck and start thinking about other approaches.



"Mathematicians solve problems quickly, in their head."

Actually, solving problems quickly is a sign of experience and practice not natural talent. Everyone takes time to learn new concepts.

Writing out your workings helps to embed knowledge in your brain so, when in doubt, write it out!



"Maths is best studied alone."

Sometimes it's important to concentrate on self-study but it's also very useful to work with others. Not only will you gain new insights but explaining things to other people helps you understand them better and helps to make them stick in your memory.

Mythical creatures: Unicorn (first recorded in ancient Greek natural histories), Cerberus (Greek mythology), winged cat (various cultures inc. Sumerian, Akkadian, Persian), Centaur (Greek mythology), Alien (are they a myth though?), Kraken (Scandinavian), Poseiden (Greek mythology)

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