HOW TO STUDY – some thoughts!

Things that will help you in your study:

1. Tidy, ordered notes on the topics that are covered.

It is important to find a system that works for you. One that is:

- Easy to refer to.
- Clear.
- Includes book references.

It might be helpful to highlight:

- Main points.
- Formulae.
- Important pieces of information.
- Important techniques.

You are not limited to writing down what you teacher puts on the board – do add your own annotations in a way that will help you understand and remember later.

2. Organising your working week

Go over work while it is still fresh in your memory.

Don't leave it until 10 minutes before the lesson to do your homework and do prepare for the lesson you are going to.

3. There are three main areas you will need to concentrate on in your work:

I. Understanding the new theory that you meet.

You will find it helpful to

- Go through the work that has been covered in the lesson and make sure that you understand all that has been presented to you.

- Refer to relevant sections in text book(s) in order to get a different perspective on what you have learnt as necessary.

- See if these add anything to what was covered in lessons, add these to your notes including a reference to where you found them.

- Pick out the main points and learn them.

Make notes of things you don't understand and FIND OUT ABOUT THEM

Try and identify exactly what it is you don't understand.

II. Memorising important bits of information e.g. formulae, etc.

It is important that you know whether particular formulae or pieces of information are in the formula book (and where to find them quickly) or whether you need to learn them.

- Spend time committing these to memory.

Make notes of things you don't understand and FIND OUT ABOUT THEM

Try and identify exactly what it is you don't understand.

III. Applying the new theory that you have learnt to solve problems.

- Gain experience

Experience is the main way that you will learn to solve the many problems with which you will be faced during your course. Ask questions like the following to make problem solving a lot easier:

- "Have I have seen something like that before?"
- "What do I know about this topic that might be useful?"
- "Is that the formula for something I know?"
- "Do I know how to solve this kind of problem?"
- "What information is the question telling me? Are there any hints there?"

Don't worry or panic.....

- if at first you find it hard to solve problems on a new topic - you have time on your side and you can be assured that you are not the only one who is having problems or who ever has had problems with it.

Try and use what you have already learnt and the mathematical wisdom that you have gained, but always bear in mind that it is hard to do most new things at first. Most things that seem like mountains at the time look like molehills as you look back in the future.

Make a note of important techniques for different types of problems.

Make notes of things you don't understand and FIND OUT ABOUT THEM

Try and identify exactly what it is you don't understand.

4. Hints on answering questions

Read the question **carefully.**

- What is the question asking you to do? Any clues on the topic involved?
- In what order? Can you use earlier parts in later ones?
- Make sure that you are answering the question that has been asked and not a different one!

Lay out your work **neatly** and **logically.**

- Indent sections if that is helpful.
- Explain briefly what you are doing if this help the reader to understand what you are doing.
- State any formulae that you are using.
- Underline the answers you get.

In examinations

- First of all read the front of the paper - CAREFULLY!
- Then glance through the whole paper.
- Have a strategy for the order in which you are going to tackle the questions.
- With the answer books that are used now you don't have to ask the questions in the order set.
- You could do the questions that you feel most confident first if you wish as it will build up your confidence.
- At the end of the examination go back and check your work - CAREFULLY!

5. Seek help

- From friends.
- From your elders – the upper sixth mathematicians have been through it all before.
- Even from your teachers!

IMPORTANT

If at any time you feel as though you are really struggling please, please, please come and talk to us so that we can support you and help you in whatever way is appropriate. It is not a sign of weakness to admit that you are having problems, but rather it is a sign of strength and maturity. The first step to solving any problem is to admit that it exists. Even admitting a problem helps put it into its proper perspective and makes it easier to deal with.

6. ENJOY YOUR WORK

We look forward to working with you over, to seeing you work hard, to seeing you enjoy the mathematics we do, and (hopefully!) to seeing your love and appreciation of it grow.

C Morris
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