

THE OWELET

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HOW TO PREPARE FOR MATHS METHODS AND IB STANDARD LEVEL MULTI-STEP QUESTIONS

I have noticed students who are preparing for the above exams are getting practice questions from past exams and other resources to simulate what they are likely to encounter in their end of year exams. I would like to provide a few suggestions on how to learn from such questions and be ready for SACs and final exams.

Reading the whole question including all its parts helps to form an overall idea of what the problem is about and to think of possible strategies for solving it. Most of the information regarding the problem can be found at the start of the question. In addition, there might be a graph or a diagram. Highlighting crucial information, annotating and adding missing information to graphs and diagrams will often help with what knowledge needs to be used to solve the problem. Interpreting and reading between the lines is often required to be successful with extended response questions. The initial information holds unless subsequent parts have changed information regarding the problem.

After the problem is read carefully, it is about deciding what knowledge to apply to solve the problem. Sometimes there is more than one way to solve a question and it's necessary to use the most efficient method. For VCE Maths Methods exams, the answers need to be in exact form unless otherwise stated. When providing answers, ensure they are given with a rational denominator and simplified. The marking guide will help with how much time needs to be spent on each part and whether an explanation or a working step or steps are required.

If the extended response question is part of a calculator allowed exam, when and how to use the calculator will help with many steps. Many one-mark questions in VCE exam questions can be done using the calculator. Practicing using the calculator prior to the exam will help with time management in the exam situation.

There are standard questions as well as hard questions you may not know how to answer. The harder parts of a question may require students to generalize, see patterns and even think of novel ways to approach the situation. Always answer the questions that can be answered without overspending time on the challenging parts which may be only worth one mark. These hard parts are designed to separate the top students from the rest and there is generally one in every question.

It is always better not to make careless errors while doing the questions, but it is often inevitable to make such errors under exam conditions for most students. Writing a checklist of your common careless errors and consciously not making them while solving multi-step problems is a good practice to prepare for the actual assessments. Check for reasonableness of the answer, make sure you are answering the questions and show understanding of interpretation of the situation. Most of all, during this learning phase, discuss with fellow students, teachers and tutors while learning. Have fun preparing for multi-step problems!