DOWNLOAD PDF IB MATH STUDIES BOOK

Chapter 1 : MASSIVE IB + TEXTBOOKS DATABASE : IBO

Oxford's IB Diploma Course Books are essential resource materials designed in cooperation with the IB to provide students with extra support through their IB studies. Course Books provide advice and guidance on specific course assessment requirements, mirroring the IB philosophy and providing opportunities for critical thinking.

What drew you to the field of mathematics? I always found mathematics the easiest subject at school. What motivated you to switch from teaching to writing mathematics books? Bob used to write notes for his class. Other teachers at the school used the notes, then teachers at other schools started asking for them. As the workload increased, I began editing as well as proofreading. It just gradually became a full-time job, between writing material, editing and proofreading it, and then distributing the books. These days, Michael does the editing and I do proofreading and audio. How has the field of textbook publishing changed in the years since you started? When we started, text was typed and worked solutions were handwritten. Bob would draw any graphics by hand. We moved to typesetting, but writing a mathematics textbook with the printing tools available presented its own difficulties. For example, symbols had to be copied, cut and pasted by hand onto the original pages, which was very tedious and time-consuming! Fractions were also problematic: What interests you outside mathematics? I own a few alpacas. I like listening to music; mainly classical, but I enjoy other genres as well. I really love to travel. The scenery, the history of a place, its architecture, its art â€" all of those things fascinate me. He studied laminar heat flow as part of his Honours in Applied Mathematics, and finished a PhD in high speed fluid flows in He has been the principal editor for Haese Mathematics since What motivates you to write mathematics books? My passion is for education as a whole, rather than just mathematics. In Australia I think it is too easy to take education for granted, because it is seen as a right but with too little appreciation for the responsibility that goes with it. But the more I travel to places where access to education is limited, the more I see children who treat it as a privilege, and the greater the difference it makes in their lives. But as far as mathematics goes, I grew up with mathematics textbooks in pieces on the kitchen table, and so I guess it continues a tradition. What do you aim to achieve in writing? I think a few things: I want to write to the student directly, so they can learn as much as possible from the text directly. I therefore want to write using language which is easy to understand. Sure, mathematics has its big words, and these are important and we always use them. I want to make the mathematics more alive and real, not by putting it in contrived "real-world" contexts which are actually over-simplified and fake, but rather through its history and its relationship with other subjects. Horses, show jumping and course design, alpacas, badminton, running, art, history, faith, reading, hiking, photography He studied public key cryptography for his Honours in Pure Mathematics. He started with the company in , and is currently the writing manager for Haese Mathematics. What got you interested in mathematics? How did that lead to working at Haese Mathematics? I have always enjoyed the structure and style of mathematics. It has a precision that I enjoy. I spend an inordinate amount of my leisure time reading about mathematics, in fact! To be fair, I tend to do more reading about the history of mathematics and how various mathematical and logic puzzles work, so it is somewhat different from what I do at work. How did I end up at Haese Mathematics? I was undertaking a PhD, and I realised that what I really wanted to do was put my knowledge to use. I wanted to pass on to others all this interesting stuff about mathematics. I emailed Haese Mathematics Haese and Harris Publications as they were known back then , stating that I was interested in working for them. As it happened, their success with the first series of International Baccalaureate books meant that they were looking to hire more people at the time. I consider myself quite lucky! What are some interesting things that you get to do at work? I want students to have questions that pique their curiosity and get them thinking about mathematics in a different way. I prefer to write questions that require students to demonstrate that they understand a concept, rather than relying on rote memorisation. When a new or revised syllabus is released for a curriculum that we write for, a lot of work goes into devising a structure for the book that addresses the syllabus. The process of identifying what concepts need to be taught, organising those concepts into an order that makes sense from a teaching standpoint, and finally sourcing and writing the material that addresses those concepts is very involved â€" but

so rewarding when you hold the finished product in your hands, straight from the printer. Apart from the aforementioned recreational mathematics activities, I play a little guitar, and I enjoy playing badminton and basketball on a social level.

Course Summary If you use the IB Mathematical Studies textbook in class, this course is a great resource to supplement your studies, get help with an assignment or prepare for a test.

Because individual students have different needs, interests and abilities, four courses in mathematics are available: Each course is designed to meet the needs of a particular group of students. Therefore, great care should be taken to select the course that is most appropriate for an individual student. In making this selection, individual students should be advised to take account of the following types of factor. Their own abilities in mathematics and the type of mathematics in which they can be successful Their own interest in mathematics, and those particular areas of the subject that may hold the most interest for them Their other choices of subjects within the framework of the Diploma Programme Their academic plans, in particular the subjects they wish to study in future Their choice of career Teachers are expected to assist with the selection process and to offer advice to students about how to choose the most appropriate course from the four mathematics courses available. Mathematical studies SLâ€"course details The course syllabus focuses on important mathematical topics that are interconnected. The syllabus is organized and structured with the following tenets in mind: The course includes project work, a feature unique to mathematical studies SL within group 5. Each student completes a project, based on their own research; this is guided and supervised by the teacher. The project provides an opportunity for students to carry out a mathematical study of their choice using their own experience, knowledge and skills acquired during the course. This process allows students to take sole responsibility for a part of their studies in mathematics. The students most likely to select this course are those whose main interests lie outside the field of mathematics, and for many students this course will be their final experience of being taught formal mathematics. All parts of the syllabus have therefore been carefully selected to ensure that an approach starting from first principles can be used. As a consequence, students can use their own inherent, logical thinking skills and do not need to rely on standard algorithms and remembered formulae. Students likely to need mathematics for the achievement of further qualifications should be advised to consider an alternative mathematics course. Owing to the nature of mathematical studies SL, teachers may find that traditional methods of teaching are inappropriate and that less formal, shared learning techniques can be more stimulating and rewarding for students. Lessons that use an inquiry-based approach, starting with practical investigations where possible, followed by analysis of results, leading to the understanding of a mathematical principle and its formulation into mathematical language, are often most successful in engaging the interest of students. Furthermore, this type of approach is likely to assist students in their understanding of mathematics by providing a meaningful context and by leading them to understand more fully how to structure their work for the project. Mathematics SLâ€"course details The course focuses on introducing important mathematical concepts through the development of mathematical techniques. The intention is to introduce students to these concepts in a comprehensible and coherent way, rather than insisting on the mathematical rigour required for mathematics HL. Students should, wherever possible, apply the mathematical knowledge they have acquired to solve realistic problems set in an appropriate context. The internally assessed component, the exploration, offers students the opportunity for developing independence in their mathematical learning. Students are encouraged to take a considered approach to various mathematical activities and to explore different mathematical ideas. The exploration also allows students to work without the time constraints of a written examination and to develop the skills they need for communicating mathematical ideas. This course does not have the depth found in the mathematics HL courses. Students wishing to study subjects with a high degree of mathematical content should therefore opt for a mathematics HL course rather than a mathematics SL course. Mathematics HLâ€"course details The course focuses on developing important mathematical concepts in a comprehensible, coherent and rigorous way. This is achieved by means of a carefully balanced approach. Students are encouraged to apply their mathematical knowledge to solve problems set in a variety of meaningful contexts. Development of each topic should feature justification and proof of results. Students embarking on this course should expect to develop insight into mathematical form

and structure, and should be intellectually equipped to appreciate the links between concepts in different topic areas. They should also be encouraged to develop the skills needed to continue their mathematical growth in other learning environments. This course is a demanding one, requiring students to study a broad range of mathematical topics through a number of different approaches and to varying degrees of depth. Students wishing to study mathematics in a less rigorous environment should therefore opt for one of the standard level courses, mathematics SL or mathematical studies SL. Students who wish to study an even more rigorous and demanding course should consider taking further mathematics HL in addition to mathematics HL. Further Mathematics HL â€" course details The nature of the subject is such that it focuses on different branches of mathematics to encourage students to appreciate the diversity of the subject. Students should be equipped at this stage in their mathematical progress to begin to form an overview of the characteristics that are common to all mathematical thinking, independent of topic or branch. All categories of student can register for mathematics HL only or for further mathematics HL only or for both. However, students registering for further mathematics HL will be presumed to know the topics in the core syllabus of mathematics HL and to have studied one of the options, irrespective of whether they have also registered for mathematics HL. Examination questions are intended to be comparable in difficulty with those set on the four options in the mathematics HL course. The challenge for students will be to reach an equivalent level of understanding across all topics. There is no internal assessment component in this course. Although not a requirement, it is expected that students studying further mathematics HL will also be studying mathematics HL and therefore will be required to undertake a mathematical exploration for the internal assessment component of that course. However, candidates registering for further mathematics HL will be presumed to know the topics in the core syllabus of mathematics HL and to have studied one of the options, irrespective of whether they have also registered for mathematics HL. The challenge for candidates will be to reach an equivalent level of understanding across these topics.

Chapter 3 : Oxford Textbook PDFs : IBO

The most comprehensive and correct syllabus coverage, with unrivalled guidance and support straight from the IB. This course book is completely comprehensive with over pages and a free eBook, and was written with the IB so you can trust in an authoritative syllabus match.

Chapter 4 : IB Mathematics SL - Wikibooks, open books for an open world

The textbooks for Mathematical Studies SL, Mathematics SL, and Mathematics HL (Core), each have a corresponding worked solutions book and an exam preparation and practice guide. Find out what's new in this series.

Chapter 5 : IB Maths Studies - Wikibooks, open books for an open world

We have ordered the Mathematics SL and Mathematical Studies books, and we love them. - Padmini Nadar-Japal, IB Coordinator, Windhoek International School, Namibia The Oxford IB course books are the best ever resource for both teachers and students.

Chapter 6 : Mathematical Studies SL (3rd edition) â€" Haese Mathematics

The IB Mathematical Studies SL curriculum consists of eight compulsory topics (for first examinations in) In addition, students are required to take part in a project that requires them to take measurements or collect data, and subsequently analyse and evaluate it in a report.

Chapter 7 : Revision Books | IB Maths

DOWNLOAD PDF IB MATH STUDIES BOOK

Mathematics for the International Student: Mathematical Studies SL has been written to embrace the syllabus for the two-year Mathematical Studies SL Course, first examined in The course has a significant technology focus, and this book has been written with this in mind.

Chapter 8 : Your Mathematical Studies SL : Secondary: Oxford University Press

Mathematics for the International Student: Mathematical Studies SL has been written for use with the two-year Mathematical Studies SL course, which is one of the courses of study in the IB Diploma Programme.

Chapter 9 : ib mathematical studies | Download eBook pdf, epub, tuebl, mobi

The IB Diploma Programme (DP) is a rigorous, academically challenging and balanced programme of education designed to prepare students aged 16 to 19 for success at.