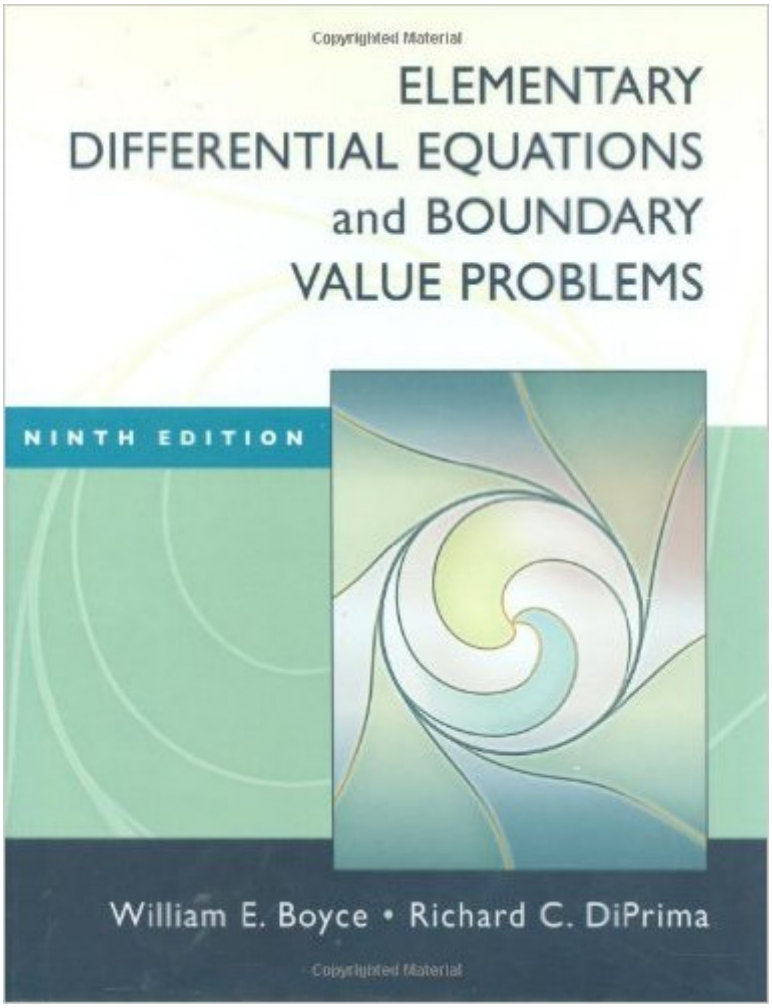
Elementary Differential Equations And Boundary Value Problems



Synopsis

Written from the perspective of the applied mathematician, the latest edition of this bestselling book focuses on the theory and practical applications of Differential Equations to engineering and the sciences. Emphasis is placed on the methods of solution, analysis, and approximation. Use of technology, illustrations, and problem sets help readers develop an intuitive understanding of the material. Historical footnotes trace the development of the discipline and identify outstanding individual contributions. This book builds the foundation for anyone who needs to learn differential equations and then progress to more advanced studies.

Book Information

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Customer Reviews

The good: none.The bad:Techniques are taught in examples, not beforehand.Ridiculously confusing notation.Large steps in arithmetic and logic are left out.Messy algebra for the sake of messy algebra -- what's the pedagogical value?Overly difficult word problems that assume prior knowledge.$150 for this?Just another bad university textbook. Move along, nothing to see.Update:I'm still using this book in my differential equations II class. This book really is the epitome of garbage. Chapter 10 flawlessly exemplifies the confusing notation, blatant use of a CAS, and pointlessly messy algebra.

Save your money and buy Ordinary Differential Equations by Tennenbaum and Pollard, or use Paul's online math notes. I PROMISE you will not learn ANYTHING from this book. The exposition is confusing at best, and many important concepts are left as exercises. If you must use this book for a class, purchase an earlier edition for a cheaper price. If you are trying to learn differntial

equations solely from this text, it will be rough sailing.

Save yourself a few hundred bucks and buy the 9th edition used for $15. I have seen the 10th edition and the material is 97% the same - they didn't even change the numbers in the problems.Now, the book "feels" closer to a science book than a math book. That is, definitions and equations are embedded in blocks of text as opposed to being neatly presented in a table. The techniques are taught by example with very little explanation. The worst part is that they will skip the manual computations and jump straight to Maple, not very helpful for exams! It would be infuriating if this text was used for self study. Thankfully, there is a ton of differential equation material out there.

Textbooks are big money; everyone knows that. But, now they aren't even trying to hide that new editions are only about the money. People make mistakes, even the infallible textbook authors, and improvements can often be made on anything, but after a few editions maybe it's time to give it a rest. You can go to any college library and find a plethora of great and decent differential equation books , almost all of which approach the subject much better than Boyce and DiPrima.

Book arrived quickly and was in new condition. BUT... if you need a book that you can actually read and learn from, this is not that book. The concepts are not organized or presented in a coherent and logical manner. Trust me there are better differential books out there.

Many of the exercises skip important steps in the process leaving the reader to interpret and over-analyze the exercises. It also doesn't help when there are often just one exercise for certain methods of solving ODEs. It makes learning the subject much more difficult. When it comes to doing the problems, sometimes they lump the hardest and most tedious ones right at the start, instead of allowing you to ease into them. The explanations are written in lengthy paragraphs which also seem to over complicate things. Overall, I would only buy it if it is required to do the problems, but otherwise a horrible book for learning differential equations.

If you have to take this class, all I can say is I'm so sorry and best of luck. It's difficult because of all of the math jargon. I got an A in my class (which had a horrible professor) because I was able to decrypt the equations and processes in the book.Best advice I can give is to check out the MIT Open Courseware for the areas where you are struggling. The online lectures are extremely

helpful.Hope this helps!

Overall:1/10-TL;DR reviewPros: paper feels nice, cool cover, GREAT exercises at the back of each chapter.Embarrassingly that's it for pros.Cons: book is terrible at explaining the simplest things, and often skips steps that the reader wouldn't have thought about.--Full review:I own about 60+ books and this is probably the worst book I own in my library, second to Advanced Calculus by Widder.The chapters of this book that were assigned to us are by far the most irritating chapters of a book I've ever had the displeasure of reading. The sections on exact Equations were made way more difficult than they needed to be by skipping countless steps or using new notation that's not known to new students of Differential Equations. Chapter three is somewhat decent when discussing homogenous Differential Equations of order two, but quickly becomes useless again when attempting to teach nonhomogeneous Equations. You get the idea; the rest of the book follows the pattern.I believe that the main problem with the book is that it offers pages and walls of text before giving a concrete example instead of offering a theorem and walking you through an example. Towards the end of the semester I had a stack of 6 other DE books, as I struggled with a terrible Russian professor and this pathetic excuse of a book.I've yet to find a decent DE book that covers Eigenvalues and matrices (otherwise it would be Tenenbaum's DE'S), but "Elementary Differential Equations and Boundary Value Problems" by Powers is good, better than this 'book'.-

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