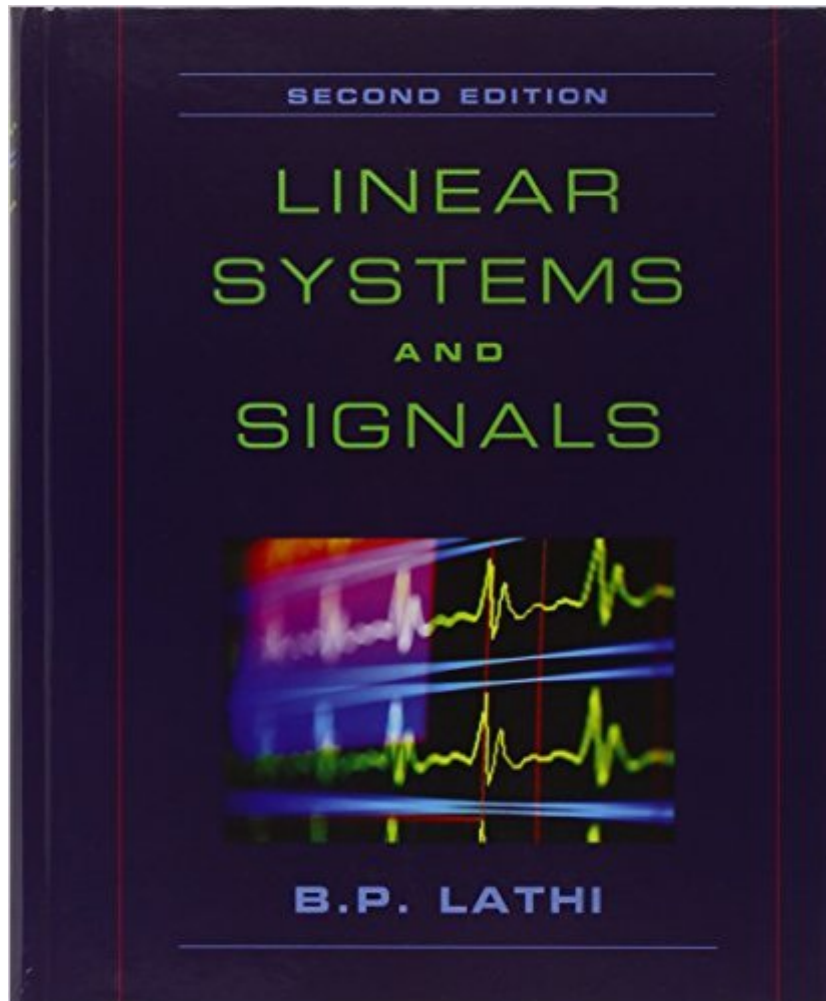# Linear Systems And Signals, 2nd Edition

Synopsis

Incorporating new problems and examples, the second edition of Linear Systems and Signals features MATLABÂ® material in each chapter and at the back of the book. It gives clear descriptions of linear systems and uses mathematics not only to prove axiomatic theory, but also to enhance physical and intuitive understanding.

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Customer Reviews

The author is really solid. He writes his text carefully. You won't find a higher quality, more coherent book on the subject when it comes to systems. The best part is the fist half, the first 6 chapters on system analysis.The second half, signal analysis, is also quite good, but a bit harder to understand and follow than the first half. It is still far better than just about every other book out there... except for Peter Kraniauskas' book, "Transforms in Signals and Systems," which is the best choice for understanding signal analysis. I highly recommend getting both Lathi's book and Peter's book if you can afford it.If you can only afford one book, you are a first time student in systems and signals, or you are interested mainly in circuits, filters, transfer functions, frequency and phase responses and so forth, go with Lathi's book.If you can only afford one book, and you are interested in DSP with Fourier analysis, and discrete Fourier analysis, as well as spectrum analysis in general, go with Peter Kraniauskas' book.In Summary:If you are in a class called "Systems and Circuits" or something like that, get Lathi's book.If you are in a class called "Discrete Time Signals and Systems" or "Frequency Analysis", go with Peter's book.

In 1996, I bought this book for a class on Linear Systems.After reading the first three chapters of this book,I quickly became very impressed with Author's Style.Lathi's book is well writen and it is very easy to understand.When I took my communication class, I decided to buy Lathi'sModern Digital Communication book even though we were assigneda different class book. Lathi's books are fun to read and learn.I use this book every day as a Reference for my Digital Signal Processing projects.

This book is pretty good example of what all can go wrong in a educational text. The black-and-white gets tiresome to go through and makes it even more uninteresting than it may already be for some. There are very little pictures, and whilst there are examples, the text is lacking many specific scenarios that would certainly assist someone attempting to learn about signal processing or any of the topics covered.The questions are often worded a bit obscurely, and the solutions manual is probably incorrect 80% of the time. There is no "answers to odd-numbered exercises" appendix in this text, leading to further frustration with attempting to check work, or get some pointers on how to go about the exercise in general.There are some pretty handy MATLAB examples throughout the text, however, which serve useful in answering problems and studying the methods to approach certain scenarios with.When looking at the whole picture, though, I cannot recommend this book to anyone who has the choice of purchasing it. It is vaguely written, pretty dry overall (author attempts to use comic scenes occasionally to no effect), and has a horrendous solutions manual with bad questions in general as well.

Lathi's book is an excellent, easy-to-read and easy-to-understand text on systems and signals. He spends a lot of time explaining in-depth examples, doing so without assuming the student has insight he or she probably does not-a common problem in other textbooks. Lathi goes out of his way to explain every nuance, greatly helping the learning processsUnlike most other textbooks, this one is easy to read, without a glut of technical jargon, or pages and pages of mathematical formulae without text explaining where the author is heading. Lathi also includes a very comprehensive background section, polishing and reviewing the mathematical techniques necessary for solving the problems. It is handy to have this in one book, rather than require trigonometry, matrix algebra, and differential equations books at the standby for review.One complaint is that this book does not have solutions to some of the homework problems, helping with additional study. This isn't quite the problem it is in other books since the examples are very thorough and insightful.Simply put, not only

is this probably the best textbook on systems and signals, it is one of the best textbooks I have ever used.

"This book stands head and shoulders above the rest of the books in the field... A pedagogically sound approach... I like the author's style of writing. All the chapters are uniformly well written and reflect the author's experience in teaching the subject to students with varying degrees of interest and abilities. He recognizes the common source of student difficulty and addresses each one."

"This is truly an excellent book...Lathi's writing is of high caliber...I believe the strongest point of the book is prof Lathi's ability to describe very difficult material in a very clear and simple way."

"It is the best text I have seen so far... I was very impressed with the book... It is written very well and stands unique among other texts in its detailed examples and consistent intuitive discussions of the concepts and mathematical tools introduced throughout."

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