Reviews of Elementary Algebra

(selected from Amazon.com and HomeSchoolReviews.com)

From Amazon.com

Finally! A readable first year algebra text!, October 13, 1998 By: <u>Molly Crocker</u> (Ferndale, WA United States) This book is a kinder, gentler approach to first year algebra. Harold Jacobs actually writes math texts that are fun to read.

The sequence of this book is a little different than most algebra books. Jacobs starts off with one of those "Think of a number" puzzles, and shows with diagrams how it works, and then translates it into algebraic notation. This is the point of algebra: How do you say with numbers what you can diagram? This leads quite naturally into Cartesian coordinates and a discussion of some basic functions. Exponents, polynomials, factoring and quadratic equations follows a full treatment of linear equations and systems.

I use this book with homeschooled students, because they can actually take it home and study it. The homework problems come in four sets. Set I is review problems. Set II applies to the lesson and has all the answers in the back of the book. Set III is similar to Set II problems, but does not have the answers in the book. Set IV is some logic puzzles and brain teasers for students who love math. Answers to sets other than Set II are in the teacher's guide to Elementary Algebra, along with some wonderful extra material and teaching suggestions. Amazon, why don't you carry the transparencies for this text?

I highly recommend both this and Harold Jacob's text on Geometry, a good, oldfashioned approach to Euclidean geometry and proofs. Enjoy! Really.

********* A caution toward a prior review, October 8, 2005 By: <u>Molly Crocker</u> (Ferndale, WA United States)

I have a particular caution for those attempting to teach themselves algebra. Despite the fact that this IS a readable and engaging textbook, people need to know that algebra is a subject that very few people can attempt to do by themselves. I work with homeschoolers, and I do not know of any who were able to accomplish algebra completely on their own, with no parental help, no other person to guide. I have heard of some, but I do not know them, and I am skeptical. Most who claim to have done algebra entirely on their own have some pretty desperate gaps in their understanding. Most homeschoolers who attempt to self-study algebra end up dropping out of math at this point. On the other hand, I have worked with students who used some pretty awful algebra texts but have successfully accomplished algebra because they HAD A GOOD GUIDE.

Algebra is a foreign language. Trying to do it on your own is rather like going on a tour of a foreign country in which you do not speak the language. There will be some wonderful things to see, but explanations in your own language are only part of the story. You get the full flavor, the full understanding, when you yourself actually have been taught to speak the language. That works best when you have someone who can actually speak the language help you learn. You would not attempt to learn a language without hearing it. For that reason, I have stopped recommending any math beyond pre-algebra as a self-study topic. Refresh and review on your own, of course. But if you've never done it before, and you don't have a good guide who speaks the language well (parent, friend, teacher), then don't expect great results, no matter who wrote the book.

Harold Jacobs' book is still the best for the subject. It has withstood the test of time. How many textbooks in any subject area can you name that are still in publication in its first edition form since 1979? Yes, some of the cultural references are outdated, but the math is absolutely solid.

The text could be strengthened in its treatment of inequalities, and it does not include complex zeros of quadratics, but these are pretty easily supplemented if you need them. Compared to other texts I would say that this one does a better treatment than most of rational polynomials, absolute value, and in reviewing older material.

So enjoy your trip! This is the best guidebook on the market, but please find a good guide for this stage of the tour.

By <u>"mike-the-mathematician"</u> (Burlington, MA USA)

Jacobs' book has a lot of really good, interesting problems to do, and that is the most important thing in a math book. The problems are unsurpassed by any other Algebra book that I know of.

I bought 7 copies of this book so far for people who are self-teaching this summer or at least half-self teaching, because the reading level is a little high (many large words). Some people have a spouse, parent, sibling, or a friend who is helping out by reading some of the problems to the self-learner, without doing them.

It would be good to come out with a version of the problems in this book with, say, a seventh grade vocabulary to open it up to people whose reading skill is not that high yet. This would SEPARATE the reading work from the algebra work.

In the end, of course, one must master language in order to master math. In the beginning, however, it is still good if one has the motivation to self-learn some Algebra, even before becoming am master-level reader.

By N. F. Taussig (Bronx, NY)

Harold R. Jacob's text is a lively and clearly written introduction to elementary algebra. Jacobs engages the reader through puzzles, including the number trick with which he starts the book, humor, and references to actual persons and events. He finds intriguing ways to introduce topics, then explains the concepts well. Concepts are introduced incrementally. Often, Jacobs introduces a concept in a particular context so that the student gets the idea before reintroducing it later in a broader context after the student has learned additional material. This reinforces the concepts and contributes to the student's conceptual understanding of the material, as do his problem sets. While Jacobs makes sure that the student can perform the algorithms presented in the text, the problems that he poses are designed to reinforce the concepts by exploring all aspects of the topics that he covers.

Each section concludes with four problem sets. The first set is a brief review of earlier topics (aside from the first five sections of the first chapter). The second covers the topics in the section. Jacobs provides answers to the problems in the second set in the back of the text, making the book suitable for self study. The third set is a variation on the second. The fourth set consists a puzzle or a problem that extends the concepts learned in the section. I particularly enjoyed these problems, often turning to them to see what Jacobs was asking before I finished the other problems. Each chapter concludes with a chapter summary and two sets of review problems.

Jacobs begins the text with a review of arithmetic, including the order of operations and properties of integers and rational numbers. He introduces algebraic concepts gradually as he does this. This leads to a discussion of functions, linear equations, lines, systems of linear equations, and exponents. Jacobs pauses for a midterm review. Then he covers polynomial, rational, and radical expressions and equations. He also discusses the properties of the real numbers, inequalities, and number sequences before finishing his text with a final review.

If you enjoy this text, and I think you will, you may wish to explore Jacobs' text <u>Geometry: Seeing, Doing, Understanding</u> next.

From HomeSchoolReviews.com

Grades Used: 9th

We had grown tiresome of Saxon and had heard great things about Jacob's Algebra. My son is strong in math, but as the year went on, he would occasionally bog down on something. This set does not include a solutions manual or any support at all. After having used Saxon for so long, I was totally frustrated by this. We finally gave this set up at the end of January, because of a lack of solutions. I am not good in math and could not help my son.

I will say that he enjoyed it tremendously, and was quite disappointed that we had to give it up. He loved the cartoons and simplistic manner in which Jacobs taught. But we picked up Bob Jones Algebra, and are buzzing along now.

Grades Used: 9th

We found that after years of using Saxon, the Jacobs Algebra was a breath of fresh air. I have a boy who is more inclined toward math and a girl who is not. They are both thriving mathematically with the Jacobs.

We were getting bogged down with Saxon Algebra 1/2 and needed something new. Math was taking hours to complete! Our curriculum advisor recommended that we do some of the Key to Algebra workbooks then move into the Jacobs. We did that and it was a very smooth transition.

My children love the presentation of the material (which is thorough and entertaining) and they find the little cartoons and stories interesting. Those two things work together to make the material relevant.

I highly recommend this text if Saxon is not working for you.

Grades Used: 8th

My son used Saxon while in a private school. When we started homeschooling we heard about Jacobs so decided to give it a try. My son loved it compared to Saxon. He found that the pictures give him a clear understanding of the formulas whereas Saxon just taught the students to memorize them. The cartoons and math *tricks* keeps it lighthearted too and makes Algebra fun.

Grades Used: 8-9

I initially sought out this text because Saxon just wasn't working well with my son. After a few months of using Jacobs' Elementary Algebra, I'm finding I went too far the opposite direction! As one math instructor put it, Saxon is at one end of the spectrum and Jacobs is at the other.

While it is a bit more personable and user-friendly than Saxon, it tends to require the student to be more mathematically intuitive than Saxon. I've found that girls who use this text do well with it, but boys may want to choose another text, one more straight forward, yet offers adequate explanation.

Overall, I was disappointed in this text. There is no solutions manual, like Saxon offers, and offers no support, again like Saxon does.

If you're considering this text for your student, look through it very carefully before purchasing it. If you child tends to have a mathematical intuitiveness, this may be perfect for them. If not, then they will find this text frustrating.