Textbook reviews

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The textbook **"Introduction to Trigonometry"** by Terence Brenner and Daniel Maysonet begins conveniently with a pretest on the basics of trigonometry. Each pretest question is accompanied by the section number, where the reader can find the material related to that topic. Each section is accompanied by sample problems that can be assigned as homework or solved in class. A sample test is provided at the end.

The style of the book is significantly different than the style of other modern trigonometry books. Everything here is brief and straightforward, presented without excess of talking, which will be highly appreciated by students. The book contains lots of pictures and many solved examples explained in a very compacted manner. This book can easily compete with the popular Khan Academy videos in terms of explaining the topics in a shortest and simplest way.

The book begins with basic material and terminology about angles, their orientation, and measurements. Section 1.8 contains instructions for accurate use of calculator to solve equations with trigonometric functions. Few examples are solved showing the pictures of the key-strokes to explain the process of using the calculator, so the students can compare their results on each stage of work. The authors carefully point out the most common mistake, which is the incorrect MODE of the calculator, to avoid confusions in students work between degrees and radians. Section 1.9 contains numerous application problems, again accompanied by pictorial solutions. Section 1.10 with trigonometric identities contains insightful guidelines for students to work on verifying trigonometric identities.

The appendix of the book contains the tables of trigonometric functions for angles between 0 and 90 degrees. The answers to odd numbered problems and the index of mathematical terms follow the appendix.

The textbook **"Review of Intermediate Algebra and Introduction to Trigonometry"** by Terence Brenner and Dae Hong is written in a transparent and available way. In addition to covering the standard material of college algebra book, such as rational equations, radical equations, and quadratic equations, it contains a chapter on complex numbers conveniently presented before the chapter on quadratic equations.
Here are few features that distinct this textbook from others. The vertical and horizontal methods of adding rational expressions with different denominators are explained and compared in a table. The chapter on rational equations contains numerous examples of applications using the formula:

(rate of work per hour) x (time worked) = part of the job completed. Sample problem sounds as follows: If a mason can build a wall in 10 hours and an apprentice in 15 hours then how long will it take them to build it when they work together?

Chapter on radical expressions contains a careful explanation of the notation and clarifies a common confusion of the minus inside or outside of the square root sign. Chapter on quadratic equations elaborates generously on the most fundamental method of solving those equation by completing the squares. This method, however, seems to be quite challenging for students. In addition, numerous application problems from basic finances and motion in space are provided. The most impressive part of the textbook is devoted to graphing quadric curves: parabola, circle, ellipse, and hyperbola. All graphing methods are explained briefly but with all necessary details. In addition, graphing of the hyperbolas contains procedure of sketching the asymptotes.

The textbook contains the answers to all assigned problems.