*Modern School Mathematics Structure and Method*, Grades VII and VIII, by Dolciani et al (Thomas Nelson & Sons)

2. For Grade VII
   *Mathematics, Concepts, and Applications*, by Van Engen et al (W.J. Gage & Co.)

3. For Grade VIII
   The second item above if available.

4. For Mathematics 10 and 20 (Geometry)
   *Geometry - A Modern Approach*, by Wilcox (Addison-Wesley)

   *Modern Geometry*, by Nichols et al (Holt, Rinehart and Winston)

5. For Mathematics 10 and 20 (Algebra)
   *Modern Intermediate Algebra*, by Nichols et al (Holt, Rinehart and Winston)

   *Modern Algebra and Trigonometry*, by Dolciani et al (Thomas Nelson & Sons)

6. For Mathematics 30
   *Functions, Relations, Transformations*, by Elliot et al (Holt, Rinehart and Winston)

   *Algebraic Structures and Probability*, by Elliot et al (Holt, Rinehart and Winston)

Mathematics 10 was revised effective September, 1969, by deleting Reviews A and B and by adding Chapter VI (Relations) and Chapter VII (Systems of Linear Equations).

Mathematics 20 was revised effective September, 1969, by adding Chapter XII (Sections 12.1 to 12.12 only).
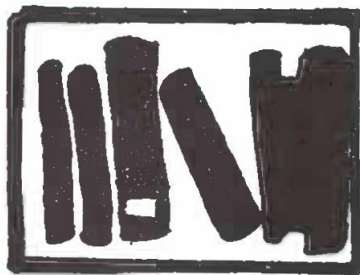
# Book Review

*Modern Trigonometry*, by Eugene D. Nichols and F. Henry Garland. Holt, Rinehart and Winston of Canada Limited. 833 Oxford Street, Toronto 18, Ontario, 1968. viii and 328 pages. $6.15 (Canadian)

The book contains 10 chapters, three appendices, tables and an index. The first chapter introduces the inevitable notation of sets, inequalities and

functions.  A rather unsatisfactory attempt at defining irrational numbers is made, and it would have been better not to introduce these numbers at all.  As with all other chapters, diagrams are very neat, colored and numerous.  In some places there are perhaps too many, as in Chapters 3 and 6.

All the standard work is covered, but not well organized.  For example, in Chapter 3, the Cosine is defined:  Given W, for which $W(U)=P(x,y)$, the cosine function is $(O,x)$: and one has to build up a theory of a Wrapping function in Chapter 2.  Pedagogically, confusion will result in teaching from this book, since it is inclined to fall over backwards to be modern.  Later chapters on trigonometric equations and identities are done much better; however, the use of "o" for degrees in all expressions:  $\cos u^c + \sin u^o$  etc. is probably necessary.  In order to see if a trigonometry text is any "good", I just turn to the chapter that deals with the proof that $\cos (A-B) = \cos A \cos B + \sin A \sin B$.  This book does the proof admirably - see page 99.  Again, the diagram, although neat, is difficult to understand.

In my opinion, Chapter 9 on Complex Numbers is the best in the book. The topic of vectors is well covered in Chapter 10.  A large number of good exercises may be found throughout the book.  The section which was covered the least satisfactorily was Chapter 8 on Inverse of a Function.  Inverse functions can be a little tricky to teach to newcomers, and definition should be kept to a minimum.  The issue is clouded in this book by the introduction of a new function called "Cap Sin", which is then related to Arcsin.  Great confusion will result unless the functions are related to their graphs.  The writers of the book attempt to do this on pages 218 and 219 but do not really succeed.

In conclusion, I would say that *Modern Trigonometry* is quite well written, the printing is excellent, exercises are first class, answers are adequate, definitions are too numerous, and some chapters are confusing.  The book is well worth having in the library, but considerable experimentation is required before it can be adopted confidently for classroom use.

<div align="right">
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