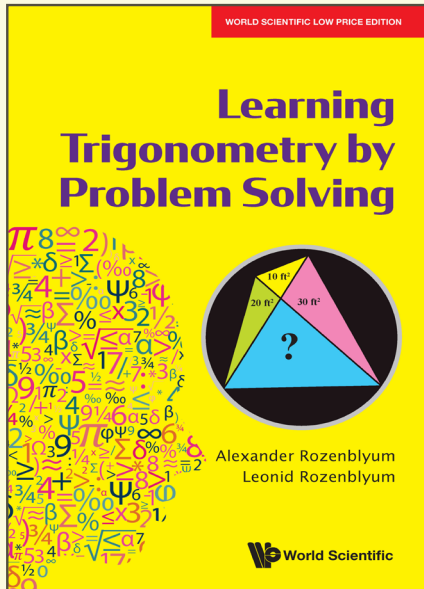


Learning Trigonometry by Problem Solving



By **Alexander Rozenblyum**
(The City University of New York, USA)
Leonid Rozenblyum

ISBN	9798886130386
Extent	380pp
Binding	Paperback
Year	2024
Price	Rs. 1595

ABOUT THE BOOK

In this book, trigonometry is presented mainly through the solution of specific problems. The problems are meant to help the reader consolidate their knowledge of the subject. In addition, they serve to motivate and provide context for the concepts, definitions, and results as they are presented. In this way, it enables a more active mastery of the subject, directly linking the results of the theory with their applications. Some historical notes are also embedded in selected chapters.

The problems in the book are selected from a variety of disciplines, such as physics, medicine, architecture, and so on. They include solving triangles, trigonometric equations, and their applications. Taken together, the problems cover the entirety of material contained in a standard trigonometry course which is studied in high school and college.

We have also added some interesting, in our opinion, entertainment problems. To solve them, no special knowledge is required. While they are not directly related to the subject of the book, they reflect its spirit and contribute to a more lighthearted reading of the material.

READERSHIP

Students and Mathematics instructors at high school, undergraduate students.

CONTENTS

- Introduction to Trigonometric Functions
- Solving Right Triangles
- Trigonometric Properties in Right Triangles
- General Definitions of Trigonometric Functions
- Basic Properties of General Trigonometric Functions. Methods for Reducing to Acute Angles
- Solving Oblique Triangles: Law of Sines

- Solving Oblique Triangles: Law of Cosines
- Addition and Double Angle Formulas
- Product, Sum, and Difference of Trigonometric Functions
- Radian Measure
- Graphs of Sine and Cosine
- Sinusoidal Functions
- Applications of Sinusoids
- Graphs of Tangent and Cotangent
- Basic Sine Equation and Inverse Sine Function
- Inverse Cosine and Tangent. Basic Trigonometric Equations for Cosine and Tangent
- Trigonometric Identities, Inequalities, and Equations
- Applications to Geometry
- Historical Background of Complex Numbers. Cardano's Formula
- Definition and Properties of Complex Numbers
- Appendix: Two Remarkable Triangles
- Summary of Results
- Answers and Solutions to Problems and Exercises
- Index

For orders and enquiries, please contact us:

FEEL
Books

FEELBOOKS PVT. LTD.

www.feelbooks.in

DELHI

4381/4 Ansari Road, Daryaganj, New Delhi 110002

Tel: +91-11-47472630

Email: orders@feelbooks.in

BENGALURU

C-22, Brigade MM, KR Road, Jayanagar 7th Block, Bengaluru 560070

Tel: +91-80-26762129

Email: bangalore@feelbooks.in

MUMBAI ♦ CHENNAI ♦ KOLKATA ♦ HYDERABAD



For any queries, please email us at marketing@feelbooks.in



www.feelbooks.in