Contents

CHAPTER SIX

Area and Volume

CHAPTER SEVEN

Transformations, Bearing and Scale Drawing

CHAPTER EIGHT

Set

CHAPTER NINE

Number System

CHAPTER TEN

Ratio and Proportion

CHAPTER ELEVEN

Profit, Loss and Discount

CHAPTER TWELVE

Unitary Method and Simple Interest

CHAPTER THIRTEEN

Statistics

CHAPTER FOURTEEN

Algebraic Expression

CHAPTER FIFTEEN

Equations, Graphs and Inequalities

Preface

The Quality Mathematics series for school students is developed to promote meaningful and enjoyable learning resources in school mathematics. This series is developed according as the existing school curriculum of Nepal. While developing this series we incorporated the global practices as well as local need and interest of the students. This series is developed considering our experiences in the development of mathematics curriculum, learning materials, training materials and textbook, and in teaching and conducting teachers' training. The results from the experiments conducted during the process of writing this book have also been considered while developing this book. The Quality Mathematics Book 8, one of the books of the series, has been designed for grade eight students of Nepal following strictly the curriculum developed by the Curriculum Development Centre, Government of Nepal.

Each lesson of this book is structured in such a way that student will be able to develop basic concepts on the contents of the lesson and apply those concepts in solving problems. The main objective of such structure of lesson is to make learning meaningful and provide students with contextual and motivating learning environment. The structure of the book encourages and provides opportunity to the students to work themselves with the suggested activities. It also encourages working in small groups or pairs for suggested activities or solving the problems. In each chapter conceptualization begins with either recalling previous knowledge and experiences or presenting relevant examples and activities. The lessons in the book provide opportunity to identify relevant relations, methods, rules and formulas through contextual examples and activities. Contextual examples, pictures and activities have been included to create meaningful and interesting learning environment. Mathematics laboratory activities are suggested to encourage students' creativity and providing them with participatory and learning by doing environment. In order to reinforce problem solving skills and motivating students for practicing similar problems varieties of workout examples are included in each lesson.

Generally, there are four categories of problems in each exercise. Oral exercises are designed for immediate feedback to the students by evaluating their mastery in basic concepts and ideas leant in the lesson. Three groups (A, B and C) of written exercises are arranged according to their level of increasing difficulties and the level and forms of application. These groups are a kind of hierarchical chain of group