

Mathematics for Healthcare Professionals

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A Text/Workbook with Applications

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Introduction

This text provides a one-semester course in the basics of mathematics needed for Healthcare Professionals such as nursing students, medical assistants and technicians and dental hygienists and assistants. The course covers fractions, decimals and percentage without the use of calculators as is the case on many State Board Exams. The language is designed to be readable and in terms of everyday usage rather than formal and strict mathematical terms.

In addition to basic mathematical computations, several chapters are devoted to application problems involving dosage, concentration and dilution of solutions. The English and Metric systems of measurement are included with intra- and inter-system conversion and computation. An introduction to reading graphs is presented as well as a chapter on basic statistical concepts and using basic statistical measures. A chapter on algebra is included.

The workbook style of the text allows students freedom to move at a pace that ensures mastery of the material as well as flexibility for covering topics in any prescribed manner. Students should read the material, study the examples, and work all the exercises in a particular problem set before checking answers. The answers to odd-numbered exercises are provided in the Answer Keys.

In many programs, this may be the only math course students are required to take. If this is one of your early course offerings, the material will be valuable and useful in other courses, in particular chemistry and clinical practices labs.

The intent and focus of this text is on practical mathematical techniques and concepts. It is NOT intended as a course on medications or the administration of medications. Any medicine references in the text are used to illustrate and practice arithmetic, and may not be the actual dosages or concentrations available or used.

It is our hope that you will find the material useful and pertinent. If you have comments or suggestions please contact me at:

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