

## Preface

The purpose of this book is to show the use of mathematics. The proficiency in the use of a scientific calculator is essential. We will go over efficient use of scientific calculators as we go along, but to show you the kind of computations we will be doing, try computing the following two quantities:

$$\frac{27000 \left( 1 + \frac{0.0625}{12} \right)^{60} \times \frac{0.0625}{12}}{\left( 1 + \frac{0.0625}{12} \right)^{60} - 1} =$$

$$18000 \left( 1 + \frac{0.056}{12} \right)^{45} - \left( 35000 \left( 1 + \frac{0.056}{12} \right)^{45} - \frac{12000}{0.056} \right) =$$

The answers are 525.1300658 and 4714.691987, respectively. In doing these computations, you must use the memory keys. Copying down the partial results and keying the partial results back in are not only inefficient but contribute to making mistakes. Learning to use a scientific calculator accurately is an integral part of this course. We will start doing these computations in the second week of the semester, and so you must have a scientific calculator by then.

Scientific calculators that we recommend are the simple ones. We will illustrate the use of scientific calculators with TI-30XA. If you have other calculators, you must have the instruction manuals. The bulky graphing calculators can do a lot more complicated operations, but they are not suited for doing the computations we do in this course.

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