

Forward

This calculator manual has been written to accompany the third edition of *Stats: Modeling the World* by David Bock, Paul F. Velleman, and Richard D. De Veaux. Its chapters have been organized to closely follow the order of topic presentation in the text. Material is primarily focused on the TI-83/84 series calculators, with additional instructions for the TI-89 series and TI-Nspire handheld where its operation differs significantly from the others.

If, as the authors of the text assert, and I concur with their statement, statistics is a process involving three main steps: Think, Show, and Tell; then this book is primarily about the Show step. Calculators (and computers) are in essence tools that help with the mechanics of a process. The end results they give are numbers or plots. They cannot decide what procedure is desirable or valid for any given set of data. It is up to the individual to decide if the assumptions and conditions for the desired analysis are fulfilled; if not, the analysis is invalid and any conclusions drawn are bogus. The decision of what to do with a set of data is probably the biggest problem with this course; Statistics is not algorithmic like most mathematics courses a student has had up until now, but is largely driven by logic and interpretation. Similarly, the numbers given as results of a procedure are not the ending point. These must be interpreted in the context of the situation to draw appropriate conclusions.

In my examples, I have given full instructions in use of the calculators along with screen shots as appropriate to illustrate the inputs and outputs. I have also made appropriate conclusions as warranted. I have also included in each chapter, as appropriate, a What Can Go Wrong? section which illustrates common error messages and errors and tells how to correct these. These generally occur where an error might first be encountered.

In closing, let me assure you that using this manual *can* help you learn statistics – numerous of my students who have used earlier versions of this manual have said it was extremely helpful to them during the course. Not only that, but if my husband can learn from this, anyone can!

Lastly, I would like to say that it has been a pleasure working with the authors on this and the prior versions of the text. My thanks also to the Pearson Addison-Wesley people I have worked with: Deirdre Lynch, Joe Vetere, and Sarah Gordus.