TRIOLA STATISTICS SERIES

Textbook Comparison



The Triola Statistics Series forges the relationship between statistics and our world through extensive use of a wide variety of real applications that bring life to theory and methods. All books in this series share the same core statistical content and hallmark features. New chapter problems, examples, and exercises use real-world data to provide relevant and interesting real-world statistical applications. A brief description of each textbook is provided below and the Triola Statistics Series Content Comparison document provides additional detail.

Elementary Statistics, 13th edition (ES13e)

Designed for general classroom use and does not focus on one specific technology supplement. New Tech Centers at the end of many sections provide detailed instructions for using Statdisk, Minitab, Excel, StatCrunch and the TI-83/84 Plus calculator. Displays from these technologies are used throughout the textbook.

Elementary Statistics Using Excel, 6th edition (Excel 6e)

Designed for classrooms utilizing Excel as the primary technology supplement. Excel 6e includes the same content as ES13e and integrates step-by-step Excel procedures and Excel displays into each chapter. Excel 6e does not include end of section Tech Center instructions for other technologies.

Elementary Statistics Using the TI-83/84 Plus Calculator, 5th edition (TI 5e)

Designed for classrooms utilizing the TI-83/84 Plus calculator as the primary technology supplement. TI 5e includes the same content as ES13e and integrates step-by-step TI-83/84 plus procedures and TI-83/84 Plus displays into each chapter. TI 5e does not include end of section Tech Center instructions for other technologies.

Essentials of Statistics, 6th edition (Essentials 6e)

Streamlined version of ES13e that also includes the new end-of-section Tech Centers. Essentials 6e does not include more advanced statistical topics including multiple regression, nonlinear regression, two-way ANOVA, nonparametric tests and statistical process control. See the Triola Statistics Series Content Comparison document for details.



Content Comparison



		Elementary Statistics 13 th edition	Elementary Statistics Excel 6e	Elementary Statistics TI-83/84 5e	Essentials of Statistics 6e
1	INTRODUCTION TO STATISTICS				
	Statistical and Critical Thinking				
	Types of Data				
	Collecting Sample Data	/	/	✓	/
1-4	Introduction to Excel Introduction to TI-83/84 Plus	Not Applicable	✓	✓	Not Applicable
				,	
2	EXPLORING DATA WITH TABLES AND GRAPHS				
2-1	Frequency Distributions for Organizing and Summarizing Data	✓	✓	✓	✓
2-2	Histograms	/		/	
	Graphs That Enlighten and Graphs That Deceive				
	Scatterplots, Correlation and Regression	1	/	1	/
3	DESCRIBING, EXPLORING, AND COMPARING DA	TA			
1 -	Measures of Center	✓	√	✓	✓
3-2	Measures of Variation	✓	√	✓	✓
3-3	Measures of Relative Standing and Boxplots	✓	✓	✓	✓
4	PROBABILITY				
	Basic Concepts of Probability	√	√	√	√
	Addition Rule and Multiplication Rule	✓	✓	✓	✓
4-3	Complements, Conditional Probability,	1			
	and Bayes' Theorem				
	Counting				
4-5	Probabilities Through Simulations (download only)	✓	✓	✓	/
5	DISCRETE PROBABILITY DISTRIBUTIONS				
5-1	Probability Distributions	√	/	√	✓
5-2	Binomial Probability Distributions	✓	✓	✓	✓
5-3	Poisson Probability Distributions	√	✓	✓	✓
6	NORMAL PROBABILITY DISTRIBUTIONS				
6-1	The Standard Normal Distribution	√	/	√	✓
	Real Applications of Normal Distributions	✓	/	✓	
	Sampling Distributions and Estimators	✓	✓	✓	✓
	The Central Limit Theorem	✓	✓	✓	✓
	Assessing Normality	√	√	√	✓
6-6	Normal as Approximation to Binomial	✓	<u> </u>	<u> </u>	✓

	13 th edition	Excel 6e	TI-83/84 5e	Essentials 6e
7 ESTIMATING PARAMETERS AND DETERMINING	SAMPLE SIZES			
7-1 Estimating a Population Proportion	✓	√	✓	✓
7-2 Estimating a Population Mean	✓	\checkmark	✓	✓
7-3 Estimating a Population Std. Deviation or Variance	√	\checkmark	√	√
7-4 Bootstrapping: Using Technology for Estimates	<i></i>		/	✓
8 HYPOTHESIS TESTING				
8-1 Basics of Hypothesis Testing	✓	✓	✓	✓
8-2 Testing a Claim About a Proportion				
8-3 Testing a Claim About a Mean				
8-4 Testing a Claim About a Std. Deviation or Variance	/	✓	✓	✓
9 INFERENCES FROM TWO SAMPLES				
9-1 Two Proportions		\checkmark	/	✓
9-2 Two Means: Independent Samples				
9-3 Two Dependent Samples (Matched Pairs)				/
9-4 Two Variances or Standard Deviations	/	✓	/	<u> </u>
10 CORRELATION AND REGRESSION				
10-1 Correlation	/	√	✓	✓
10-2 Regression	✓	√	✓	✓
10-3 Prediction Intervals and Variation	✓	\checkmark	/	X
10-4 Multiple Regression				X
10-5 Nonlinear Regression	✓		✓	X
11 GOODNESS-OF-FIT AND CONTINGENCY TABLES	S			
11-1 Goodness-of-Fit	✓	√	✓	/
11-2 Contingency Tables	✓	✓	✓	✓
12 ANALYSIS OF VARIANCE				
12-1 One-Way ANOVA				✓ Chpt 11-3
12-2 Two-Way ANOVA	✓	✓	✓	<u> </u>
13 NONPARAMETRIC TESTS				
13-1 Basics of Nonparametric Tests	√			X
13-2 Sign Test				X
13-3 Wilcoxon Signed-Ranks Test for Matched Pairs	/		/	X
13-4 Wilcoxon Rank-Sum Test for	✓	√	/	X
Two Independent Samples 13-5 Kruskal-Wallis Test for Three or More Samples		1		Y Y
13-6 Rank Correlation		1		✓ Chpt 10-3
13-7 Runs Test for Randomness				X
	, ,		, ,	•
14 STATISTICAL PROCESS CONTROL14-1 Control Charts for Variation and Mean			/	V
14-1 Control Charts for Variation and Mean 14-2 Control Charts for Attributes		V		X
17-2 Contion Charts for Attributes	V	✓	✓	^
15 ETHICS IN STATISTICS	✓	✓	✓	X
	1	1	1	1
APPENDIX A TABLES APPENDIX B 32 DATA SETS	./	./	•	./
APPENDIX D ANSWERS	y	y	y	,
A LIDING AROTERO	~	•	•	•