

Errata for

The Telecourse Study Guide for
AGAINST ALL ODDS: INSIDE STATISTICS
and
INTRODUCTION to the PRACTICE OF STATISTICS
Third Edition

Unit	Page	Location	Correction
1			No changes
2	14	1 st line.	Should read “the text 1.1, ...”
3	21 24	2 nd paragraph. SELF-TEST SOLUTIONS 3.1	Should read “... Table 1.8 of the text.” Should read “Use a scientific calculator if possible. The computing formula is fastest if you use a basic calculator. The equation shown on page 51 of the text is the defining formula for the variance. That is, this equation shows how s^2 measures spread about the mean. However, the equation is awkward to use because first you must subtract the mean \bar{x} from each individual observation. A bit of algebra shows that an equivalent formula is
			$s^2 = \frac{1}{(n-1)} \left[\sum x_i^2 - \frac{1}{n} (\sum x_i)^2 \right]$
			This is a computing formula for the variance; it obscures the meaning of s^2 but leads to shorter calculations. First compute
			$\sum x = 1460 \dots$
	25 26	Figure 3.1 SELF-TEST SOLUTIONS 3.2 (c), 2 nd paragraph	The upper whisker for group 2 ends at ‘51’. Should read “...from the median than the lower end. The Group 1 distribution ...”
4	28	3 rd paragraph, 5 th sentence	Should read “Study Figure 1.24 in the text to get a clear ...”
5	42	SELF-TEST SOLUTIONS 5.2, end of 2 nd line	Remove ‘the’
6	45 46	4 th paragraph, 2 nd & 3 rd sentence 1 st line ASSIGNMENT 3	Should read “... (Table 1.1 on page 8 in the text). Figure 1.6 on page 19 in the text ...” Should read “28 28 26 33 24 27 16 27 ...” Should read “... Section 1.1 Exercises 1.34, 1.35. Then smooth the data in problem 1.34 by running ...”
7	52	ASSIGNMENT 2 ASSIGNMENT 3	Should read “Read Section 2.3 of the text, stopping at the subsection ‘Least squares regression’ and then read Section 2.4, stopping at the subsection ‘Outliers and influential observations’. Then read Section 2.5.” Should read “...the Section 2.3 Exercises ...2.33, 2.37. Also, do the ...Section 2.5 Exercises ...2.71, 2.78.”

Unit	Page	Location	Correction
8	64 - 72	Page headings	Should read "Unit 8"
	64	2 nd paragraph	Should read "Note: There are two or three formulas for the slope b of the least-squares regression line. The formula on page 141 of the text is used in Unit 9 and differs from the computing formula given in the video. However, both formulas give the same result. The computing formula, used in this Unit, leads to shorter calculations, especially if you are using a basic calculator. Self-Test Solution 8.3(b) shows how the calculations are carried out using the formula
			$b = \frac{\sum xy - \frac{1}{n}(\sum x)(\sum y)}{\sum x^2 - \frac{1}{n}(\sum x)^2}$
			If you are watching the video, you will notice that this equation differs slightly. The numerator and denominator of the video formula is divided by n to get the expression written here."
		ASSIGNMENT 2	Should read "Read the introduction to Chapter 2 of the text and Section 2.1. Read Section 2.3 and 2.4 of the text concentrating on the subsections 'Least squares regression' and 'Outliers and influential observations'."
		ASSIGNMENT 3	Should read "...Section 2.1 Exercises in the text: 2.1, 2.3, 2.11, 2.15. Also, do ... Section 2.3 Exercises in the text: 2.37, 2.38 and the Section 2.4 Exercises in the text: 2.51, 2.53."
65		D. REGRESSION 1	Should read "Calculate the least squares regression line of y on x from the data, using the formula given on page 64 of this Study Guide."
71		SELF-TEST SOLUTION 8.3(b)	Should read "To compute the least squares line with a basic calculator, complete the pattern of calculations that follow:
			$\sum x = 447 + \dots + 645 = 5840 \dots"$
72		1 st line	Should read "Using the computing formula for the slope from page 64 of this Guide
			$b = \frac{\sum xy - \frac{1}{n}(\sum x)(\sum y)}{\sum x^2 - \frac{1}{n}(\sum x)^2} \dots"$

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9	75	ASSIGNMENT 2	Should read “Read Section 2.2 and the subsection on ‘Correlation and regression’ in Section 2.3. Read Section 2.4.”
		ASSIGNMENT 3	Should read “... from the Section 2.2 Exercises in the text: 2.19, 2.21, 2.24. Also, do the following problems from the Section 2.3 Exercises in the text: 2.39, 2.41.”
	76	A. CORRELATION 1	Should read “Compute the correlation coefficient r for small data sets of observations using the following equation from this Study Guide and the video
			$r = \frac{\sum xy - \frac{1}{n}(\sum x)(\sum y)}{(n-1)s_x s_y}$
			(Refer to the Self-Test Solutions 9.2 on page 80).”
		A. CORRELATION 2	Should read “Know the 7 basic properties of correlation that are listed before Example 2.9 in the text.”
		B. CORRELATION AND REGRESSION 2, 2 nd sentence	Should read “... Use the equation on page 141 of the text to find the slope b ... intercept a .”
	79	SELF-TEST SOLUTIONS 9.2	Should read “To do the calculation with a basic calculator, complete the following pattern of steps. $\sum x = 112 + \dots + 135 = 689 \dots$ ”
	80	SELF-TEST SOLUTIONS 9.2, 1 st sentence	Should read “...computing formula for the correlation coefficient on page 76 of this Guide.”
		SELF-TEST SOLUTIONS 9.4, 1 st sentence	Should read “First use the equation on page 141 of the text to find ...”
10	83	3 rd paragraph, 3 rd sentence.	Should read “A look at new computer...”
	85	ASSIGNMENT 2	Exercises 2.92, 2.93, 2.97 replaced by 2.112, 2.113, 2.114.
	97	PART I ANSWERS 16(b), 1 st sentence	Should read “The slope is found from the following equation from page 141 of the text.”
11	107	SELF-TEST SOLUTIONS 11.1 (d), 2 nd sentence	Should read “... $\frac{640}{3408} = 0.188 = 18.8\%$.”
	108	SELF-TEST SOLUTIONS 11.2, 3 rd sentence.	Should read “... That’s $\frac{150}{1300}$ or 11.54% unemployed.”

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12	113	LEARNING OBJECTIVES B	Should read "...using a diagram like Fig.3.2 in the text. The diagram ...as in Example 3.8."
13	120	ASSIGNMENT 2, 1 st line	Should read "Stratified Samples."
		ASSIGNMENT 3	Section 3.2 Exercise changes to 3.27 and Section 3.3 Exercises change to 3.33, 3.35, 3.37.
	122	SELF-TEST SOLUTIONS 3.1, last sentence	Should read "... (A completely randomised ... the familiar outline of Fig.3.2 in the text, but with 18 group rather than 2 groups.)"
	123	SELF-TEST SOLUTIONS 13.2, last sentence	Should read "The outline is similar to Figure 3.4 in the text, though ..."
14	127	1 st paragraph, last sentence	Should read "Notice in particular ... of the sample and not by the size of the population."
		ASSIGNMENT 3	Should read "...Section 3.3 Exercises in the text: 3.43, 3.45; and the ...Section 3.4 Exercises: 3.51, 3.53, 3.55, 3.59, 3.61."
15	134	ASSIGNMENT 2	Should read "Read the text Prelude to Chapter 4, Section 4.1 and Section 4.2 stopping at the subsection 'Independence and the multiplication rule'."
		ASSIGNMENT 3	Should read "...Section 4.1 Exercises in the text: 4.1, 4.4; and the problems from the Section 4.2 Exercises: 4.12, 4.15, 4.17, 4.19, 4.25, 4.27."
16	141	ASSIGNMENT 2	Should read "Read the remaining part of Section 4.2, all Section 4.3 and Section 4.4 referring only to the subsections on 'The mean of a random variable' and 'The variance of a random variable'."
		ASSIGNMENT 3	Should read "Do the following problems from the Section 4.2 Exercises in the text: 4.29, 4.31, 4.33; the following problems from the Section 4.3 Exercises: 4.39, 4.45, 4.49; and the following problems from Section 4.4 Exercises: 4.63."
17	148	ASSIGNMENT 3	Should read "Do the following problems from the Section 4.4 Exercises in the text: 4.59, 4.65; and the following problems from the Section 5.1 Exercises: 5.1, 5.11, 5.13, 5.19."
	151	SELF-TEST SOLUTION 17.1(a) 2 nd sentence.	Should read "Because $p = 0.9$ is not in Table C, count seedlings that die instead."

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18	163	SAMPLE EXAM. 2, 1 st paragraph, 3 rd sentence	Should read "...Exercises will help you review: 2.114, 3.71, 3.72, 4.100, 4.104, 5.62, 5.63, 5.70, 5.71."
	175	PART II ANSWERS 2(c), 1 st sentence	Should read "Use the Equation on page 327 of the text to ..."
		PART II ANSWERS 2(d), 2 nd sentence	Should read "By the rules on page 334 of the text for combining ..."
19	178	3 rd paragraph	Add note "Read page 505 of the text where it refers to Table D."
20	186	2 nd paragraph	Add note "See page 505 of the text where it refers to Table D."
	187	ASSIGNMENT 3	Should read "...Section 6.2 Exercises in the text: 6.27, 6.31, 6.34, 6.35, 6.39, 6.41; and the ...Section 6.3 Exercises: 6.53, 6.55."
21	194	2 nd paragraph	Change from Table E to Table D
	196	SELF-TEST QUESTION 21.1 (c)	Change from Table E to Table D
	197 --	SELF-TEST SOL.	Change from Table E to Table D.
	198	21.1 (a), (b), (c)	
	199	SELF-TEST SOL. 21.2 (a)	Change from Table E to Table D.
		SELF-TEST SOL. 21.3, 6 th & 8 th sentence	Change from Table E to Table D. Change comment to "So P is greater than 0.5."
22	203	ASSIGNMENT 2	Should read "Read Section 7.2 of the text, omitting the starred optional material at the end. Also read the introduction to Section 7.3 and the first subsection ' Inference for population spread'."
		ASSIGNMENT 3	Should read "...Section 7.1 Exercises in the text: 7.38; and the following ... Section 7.2 Exercises: 7.49, 7.57, 7.61."
	206 --	SELF-TEST SOL.	Change from Table E to Table D.
	207	22.1 & 22.2 (a)	
23			No change
24	219	2 nd paragraph, 5 th sentence	Should read "The exact statement of H_0 can be complex but the details are omitted from the text."
	220	1 st paragraph, 2 nd sentence	Change from Table G to Table F.
	225	SELF-TEST SOL. 24.1(c), 2 nd sentence	Change from Table G to Table F.
	226	SELF-TEST SOL. 24.2 (b), last para.	Change from Table G to Table F.

Unit	Page	Location	Correction
25	231	ASSIGNMENT 2	Should read “Read all Section 10.1 of the text and Section 10.2 referring only to the subsections ‘Calculations for regression inference’ and ‘Preliminary calculations’.”
		ASSIGNMENT 3	Should read “Do the following problems from the Chapter 10 Exercises in the text: 10.1, 10.2, 10.13.”
	235	SELF-TEST SOL. 25.1(c), 4 th sentence	Change from Table E to Table D.
		SELF-TEST SOL. 25.2 (a)	Add part ‘(a)’.
	236	SELF-TEST SOL. 25.2 (a), 3 rd sentence	Change from Table E to Table D.
26	250	PART I ANSWERS, 16 (c)	Change from Table E to Table D.
	250 --	PART II	Change from Table E to Table D.
	251	ANSWERS, 1 (a), (b)	
	252	PART II ANSWERS, 2, 5 th sentence	Change from Table E to Table D.
	254	PART II ANSWERS, 4, last paragraph	Change from Table G to Table F.