## Introductory Statistics Release Notes 2018

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## Page Count Difference

In the latest edition of Introductory Statistics, there are 911 pages compared to the 909 pages in the last edition. This page count variation is due to a significant amount of errata revisions and code releases to conserve space.

## Errata:

Below is a table containing submitted errata, and the resolutions that OpenStax has provided for this latest text.

| Location | Detail | Resolution Notes | Error Type |
| :---: | :---: | :---: | :---: |
| Ch 1 - data and sampling, section 2 data, sampling, and variation in data and sampling | Replace entire sentence of Solution 1.9 with: Items $\mathrm{a}, \mathrm{d}$, and g are quantitative discrete; items $\mathrm{c}, \mathrm{f}$, and h are quantitative continuous; items b and e are qualitative, or categorical. | accepted change | Other |
| Ch 1 - sampling and data, Ch review and practice section 1.2 data, sampling, and variation in data and sampling | add (categorical) after qualitative in every instance <br> under practice, number 21: In \#21, replace "How might the researchers gather random data?" with: Suggest at least two methods the researchers might use to gather random data. | accepted change | Other |
| Ch 1 - sampling and data, homework problems section 2 data, sampling, and variation in data and sampling | in problem 75, remove "Gallup healthways" <br> in problem 76d, replace "his" with "these" | accepted change | Other |
| Ch 1 - Sampling and | In the second to last | Accepted change | Other |


| Data, Section 1 - <br> Definitions of Statistics, Probability, and Key Terms, 3rd paragraph under Key Terms | sentence of the paragraph, change the text "is a number that is a property of the population." to: is a numerical characteristic of the whole population that can be estimated by a statistic. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 1 - Sampling and Data, Section 1 Definitions of Statistics, Probability, and Key Terms, 5th paragraph under Key Terms | In the first sentence of the paragraph, change the text "notated by capital letters such as $X$ and $Y$, is a characteristic of interest for each person or thing in a population." to: usually notated by capital letters such as $X$ and $Y$, is a characteristic or measurement that can be determined for each member of a population. | Our reviewers accepted this change. | Other |
| Ch 1 - Sampling and Data, Section 1 Definitions of Statistics, Probability, and Key Terms, Example 1.1 under Key Terms | In second to last sentence, change "survey" to: surveyed | Accepted change | Typo |
| Ch 1 - Sampling and Data, Section 1 Definitions of Statistics, Probability, and Key Terms, Example 1.2 under Key Terms | In Example 1.2, replace the text "1. $\qquad$ Population <br> 2. $\qquad$ Statistic 3. $\qquad$ <br> Parameter 4. $\qquad$ Sample <br> 5. $\qquad$ Variable 6. $\qquad$ Data" with: <br> 1. Population $\qquad$ 2. <br> Statistic $\qquad$ 3. Parameter $\qquad$ 4. Sample $\qquad$ 5. <br> Variable $\qquad$ 6. Data $\qquad$ | Accepted change | Other |
| Ch 1 - sampling and data, section 2 - data, sampling, and variation in data and sampling | In Solution 1.10, replace "qualitative data" with: qualitative (or categorical) data | accepted change | Other |
| Ch 1 - sampling and data, section 2 - data, sampling, and | Replace entire list with: <br> a. the number of pairs of shoes you own | accepted change | Other |


| variation in data and sampling | b. the type of car you drive <br> c. the distance from your home to the nearest grocery store <br> d. the number of classes you take per school year e. the type of calculator you use f. weights of sumo wrestlers <br> g. number of correct answers on a quiz <br> h. IQ scores (This may cause some discussion.) |  |  |
| :---: | :---: | :---: | :---: |
| Ch 1 - Sampling and data, Section 2 - data, sampling, and variation in data and sampling | In Example 1.7, replace "(16 ounces Cherry Garcia ice cream and two pounds (32 ounces chocolate chip cookies)." with: <br> (16 ounces pistachio ice cream and 32 ounces chocolate chip cookies). | Accepted change | Other |
| Ch 1 - Sampling and data, section 2 - data, sampling, and variation in data and sampling | In last sentence, delete "because weights are measured" <br> - add period after "continuous data" | Accepted change | Other |
| Ch 1 - Sampling and data, section 2 - data, sampling, and variation in data and sampling | Change this entire paragraph ("All data ... are continuous data.") to: Data that are not only made up of counting numbers, but that may include fractions, decimals, or irrational numbers, are called quantitative continuous data. Continuous data are often the results of measurements like lengths, weights, or times. A list of the lengths in minutes for all the phone calls that you make in a week, with numbers like 2.4, 7.5, or 11.0, would be | Accepted change | Other |


|  | quantitative continuous data. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 1 - Sampling and data, section 2 - data, sampling, and variation in data and sampling | Insert new sentence after first sentence (between "...population." and "Hair color..."): Qualitative data are also often called categorical data. | Accepted change | Other |
| Ch 1 - Sampling and Data, Section 2 - Data, sampling, and variation in data and sampling | In the second sentence of paragraph, change "Small" to: Lowercase | Accepted change | Other |
| Ch 1 - sampling and data, section 2 - data, sampling, and variation in data and sampling, under sampling, before exercise 1.11 | Move the section "Critical Evaluation" from p. 25 to here. <br> Move the Collaborative Exercise from p. 24 up to this position on p . 20, after the Critical Evaluation that was moved here. | accepted change | Other |
| Ch 1 Sampling and Data, Section 1.3 Frequency, Frequency Tables, and Levels of Measurement, Try It 1.14 | Page 43, "Try it" 1.14, table 1.13, Rel Freq column needs correcting, last two entries. $9 / 50=.18,5 / 50=.10$ | Our reviewers accepted this change. |  |
| Ch 1 - sampling and data, section 3 frequency, frequency tables, and levels of measurement, 2nd paragraph under levels of measurement | Replace 2nd-4th sentences of paragraph ("Some examples ... a matter of opinion.") with: The data are the names of the companies that make smartphones, but there is no agreed upon order of these brands, even though people may have personal preferences. | accepted change | Other |
| Ch 1 - sampling and data, section 3 frequency, frequency tables, and levels of measurement, 2nd paragraph under levels of | In first sentence, after "qualitative" add: (categorical). | accepted change | Other |


| measurement |  |  |  |
| :--- | :--- | :--- | :--- |
| Ch 1 - sampling and <br> data, section 3- <br> frequency, frequency <br> tables, and levels of <br> measurement, <br> example 1.18 | Table 1.15. In the row for | "Total" replace "823,356" <br> with: 823,856 | accepted change |


| 1.7 | soup (19 ounces) tomato bisque, 14.1 ounces lentil, and 19 ounces Italian wedding), two packages of nuts (walnuts and peanuts), four different kinds of vegetable (broccoli, cauliflower, spinach, and carrots), and two desserts (16 ounces Cherry Garcia ice cream and two pounds ( 32 ounces chocolate chip cookies). |  |  |
| :---: | :---: | :---: | :---: |
| Ch 1: Sampling and Data, Section: Data, Sampling, and Variation in Data and Sampling, Figure 1.5 | There should be a \% sign on "28.6". | Our reviewers accepted this change. | Typo |
| Ch 2 - descriptive statistics, section 7 measures of the spread of data, 4th paragraph under Explanation of the standard deviation calculation shown in the table, after the note | After the first sentence, add: Describing the data with reference to the spread is called "variability". The variability in data depends upon the method by which the outcomes are obtained; for example, by measuring or by random sampling. | accepted change | Other |
| Ch 2: Descriptive Statistics, Sec 6: Skewness and the Mean, Median, and Mode, Exercise 65 | I believe the median should be 12.5, not 13.5 for \#65 in Ch 2. | In the solution, revise the median from "13.5" to "12.5". | Incorrect calculation or solution |
| Ch 2: Descriptive Statistics, Exercises 34 to 39 | First of all, the formatting of the PDF version is terrible as you can see in the attached file. The instructions for problems 34 to 39 should not appear with no spacing between the instructions and the previous problems at the bottom of the previous page. <br> Second, I have no idea | Before Exercise 34, add the following: <br> Use the following information to answer the next six exercises. Sixtyfive randomly selected car salespersons were asked the number of cars they generally sell in one week. Fourteen people answered that they generally sell three cars; nineteen | Typo |


|  | what data set is supposed to be used. I couldn't even figure it out knowing what the authors say the answers are. In the online version, the link embedded in the problem doesn't take you to a data set either. <br> Please just print the data set near the problem. Don't send us to some unknown place in the book to find data. <br> Thanks. | generally sell four cars; twelve generally sell five cars; nine generally sell six cars; eleven generally sell seven cars. <br> Before Exercise 40, add the following: <br> Use the following information to answer the next two exercises. Sixtyfive randomly selected car salespersons ... |  |
| :---: | :---: | :---: | :---: |
| Ch 2: Descriptive Statistics, Sec 1: Stem-and-Leaf Graphs (Stemplots), Line Graphs, and Bar Graphs, Example 2.3 | There are only 42 leaves on the left-hand plot. There are 44 data points in Table 2.4, from which this data comes. One of the missing data points is William Henry Harrison at 68; the other missing value is 52 , which is either Abraham Lincoln or Jimmy Carter. These two values should be added to the left-hand plot. | In Table 2.3 in the solution, in the 2nd row of the 1 st column, add a " 2 " between 2 and 1. In the 3rd row of the 1st column, add an "8" between the 9 and 5. | Incorrect calculation or solution |
| Ch 2: Descriptive Statistics, Sec 2: <br> Histograms, Frequency Polygons, and Time Series Graphs, Example 2.8 | Example 2.8 doesn't explain what it's goal is, making it a little vague (at least at first). A one sentence explanation of the intention of the example at the beginning would improve it. | Revise the first sentence of Example 2.8 as follows: <br> "Create a histogram for the following data: the number of books bought by 50 part-time college students at ABC College." | General/pe dagogical suggestion or question |
| Ch 2: Descriptive <br> Statistics, Sec 2: <br> Histograms, <br> Frequency Polygons, and Time Series Graphs, Exercise 21 | "Construct a times series graph for (a) the number of male births, (b) the number of female births, and (c) the total number of births." <br> There is a typo in the table in Practice Problem \#21 in Section 2.2. The years 1871 | In Table 2.51, delete the 1st and 3rd columns from the table. Revise "1827" in the 1st row of the 6th column to "1873". | Typo |


|  | and 1872 appear twice and out of order, and then the year 1827 appears - was that supposed to be 1873? |  |  |
| :---: | :---: | :---: | :---: |
| Ch 2: Descriptive Statistics, Sec 7: Measures of the Spread of the Data, Example 2.35 | In Example 2.35, the solution contains an addition sign where it should have a minus sign.. | Revise the first equation in the solution to Example 2.35 to show " x mu/sigma". | Typo |
| Ch 2: Descriptive Statistics, Sec 7: Measures of the Spread of the Data, Exercise 101 | On \#101 in the Section 2.7 homework, the book asks us to do two box plots. The 1976-1977 through 20042005 data is missing the maximum and minimum values, and we don't have the original data, so we are unable to complete a box plot. I suggest adding in the max and min values for this data set in the summary above \#94 so the second box plot in \#101 is possible. | Revise as follows: <br> What additional information is needed to construct a box plot for the FTES for 2005-2006 through 2010-2011 and a box plot for the FTES for 1976-1977 through 20042005? | Other <br> factual inaccuracy in content |
| Ch 2: Descriptive Statistics, Section: Histograms, Frequency Polygons, and Time Series Graphs, 2nd paragraph | A space is needed between "sample." and "Remember". | Our reviewers accepted this change. | Typo |
| Ch 2: Descriptive <br> Statistics, Section: <br> Histograms, <br> Frequency Polygons, and Time Series Graphs, Example 2.7 | The "guideline" mentioned in the "Note" would to be used to determine the number of bars to use - not the width of the bars. It should be reworded to give a guideline for finding the width of the bars. | Our reviewers accepted this change. |  |
| Ch 2: Descriptive <br> Statistics, Section: <br> Histograms, <br> Frequency Polygons, <br> and Time Series <br> Graphs, Example 2.8 | Change <br> Press WINDOW. Set Xmin = <br> .5, Xscl $=(6.5 .5) / 6, Y \mathrm{Min}=$ <br> $1, \mathrm{Ymax}=20, \mathrm{Yscl}=1$, Xres $=1$. <br> to <br> Press WINDOW. Set Xmin = | Our reviewers accepted this change. |  |


|  | $\begin{aligned} & .5, \mathrm{Xmax}=6.5, \mathrm{Xscl}=(6.5 \\ & .5) / 6, Y \min =1, Y \max =20, \\ & \mathrm{Yscl}=1, \mathrm{Xres}=1 . \end{aligned}$ <br> In other words, add "Xmax $=6.5$ ". |  |  |
| :---: | :---: | :---: | :---: |
| Ch 2: Descriptive Statistics, Section: Measures of the Center of the Data | In the second example, the frequencies are 3(1) $+2(2)$ $+1(3)+5(4)$. <br> Should say: <br> In the second calculation, the frequencies are $3,2,1$, and 5 . | Our reviewers accepted this change. | Typo |
| Ch 2: Descriptive Statistics, Section: Measures of the Center of the Data, Try It 2.30 | In the solution to "Maris conducted a study on the effect that playing video games ..." $\begin{aligned} & \text { Mean }=(1.75)(3)+(5.5)(7)+ \\ & (9.5)(12)+(13.5)(7)+ \\ & (17.5)(9)=409.75 \end{aligned}$ <br> Should be: $\begin{aligned} & \text { Mean }=(1.75)(3)+(5.5)(7)+ \\ & (9.5)(12)+(13.5)(7)+ \\ & (17.5)(9)=409.75 / 38= \\ & 10.78 \end{aligned}$ <br> In other words (as stated earlier in the text), divide by the number of students. | Our reviewers accepted this change. |  |
| Ch 2: Descriptive Statistics, Section 2.7 <br> Measures of the Spread of the Data | Typo in the formula $\mathrm{z}=(\mathrm{x}$ +mean)/stdev It should be MINUS, not plus | Our reviewers accepted this change. | Typo |
| Ch 3 Terminology, Section 3.1 Terminology | In part 'd' of the solution to the first exercise in section 3.1, add "\{" before "2". <br> That is: <br> Change $\begin{aligned} & \text { A OR B }=2,4,6,8,10,12, \\ & 14,15,16,17,18,19\} \end{aligned}$ | Our reviewers accepted this change. | Typo |


|  | to this: <br> A OR $B=\{2,4,6,8,10,12$, <br> $14,15,16,17,18,19\}$ |  |  |
| :---: | :---: | :---: | :---: |
| Ch 3 - probability topics, homework problems section 3.3 two basic rules of probability, number 86 | Change "Roll two fair dice" to: Roll two fair dice separately. | accepted change | Other |
| Ch 3 - probability topics, homework section 3.1 terminology, number 66 | Change the figure of the graph of 66 | accepted change | Other |
| Ch 3 - probability topics, homework section 3.5 - tree and venn diagrams, figure 3.14 | change the figure | accepted change | Other |
| Ch 3 - probability topics, section 1 terminology, try it\#3.1 | Change "The sample space $S$ is the ordered pairs" to: The sample space S is all the ordered pairs | accepted change | Other |
| Ch 3: Contingency <br> Tables | "Solution 3.20 " is repeated 6 times. | Our reviewers accepted this change. | General/pe dagogical suggestion or question |
| Ch 3: Probability Topics, End of Ch Practice Exercises | In the homework for Sec. 3.4, the exercise about suicide rates is ambiguous. It says 'Do not include "all others" for parts fand g.' Therefore, I think the answer for $f$ should be 23720/(29760-780). Also, think the answer for $g$ should be 5010/(6020 100). <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 3: Probability Topics, End of Ch Practice Exercises | In Section 3.2, in part c of the following question, change "( AND K)" to "(J OR K)" | Our reviewers accepted this change. | Typo |


|  | Given events $J$ and $K: P(J)=$ $0.18 ; P(K)=0.37 ; ~ P(J O R K)=$ 0.45 <br> a. Find P(J AND K). <br> b. Find the probability of the complement of event () AND K). <br> c. Find the probability of the complement of event (J) AND K). |  |  |
| :---: | :---: | :---: | :---: |
| Ch 3: Probability Topics, Sec 4: Contingency Tables, Example 3.20 | Question (a) reads "Find P <br> (Person is a car phone user)." It should read, "Find P <br> (Person is a cell phone user)." | Revise Example 3.20 as follows: <br> In Table 3.2, revise "Cell phone user" to "Uses cell phone while driving" and "Not a cell phone user" to "Does not use cell phone while driving". <br> Revise "person" to "driver" throughout. <br> Revise "car phone" to "cell phone" throughout. | Typo |
| Ch 3: Probability Topics, Section: Independent and Mutually Exclusive Events, Example 3.13 | In section 3.2, in the exercise regarding a coin and a die, "If you flip one fair coin and follow it with the toss of one fair, sixsided die, the answer in three is the number of outcomes (size of the sample space)." is confusing. <br> I *think* that should say "If you flip one fair coin and follow it with the toss of one fair, six-sided die, the answer to $c$ is the number of outcomes (size of the sample space)." | Our reviewers accepted this change. | Typo |


|  | In other words: I think "in three" should be replaced by "to c". |  |  |
| :---: | :---: | :---: | :---: |
| Ch 3: Probability Topics, Section: Independent and Mutually Exclusive Events, Try It 3.12 | In section 3.2, in the exercise that starts "Mark is deciding which route to take to work.": <br> Change $P(F)=0.55$ to $P(F)=0.56$ | Our reviewers accepted this change. | Typo |
| Ch 3: Probability Topics, Section: Independent and Mutually Exclusive Events, Try It 3.8 | In section 3.2, in the exercise regarding learning Spanish and learning German: <br> Change $P(B \mid A)$ <br> to $P(B \mid A)=P(B)$ | Our reviewers accepted this change. | Typo |
| Ch 3: Probability Topics, Section: Tree and Venn Diagrams, Try It 3.26 | In sec. 3.5, I read: <br> Suppose there are four red balls and three yellow balls in a box. Three balls are drawn from the box without replacement. What is the probability that one ball of each coloring is selected? <br> I think this should say Suppose there are four red balls and three yellow balls in a box. Two balls are drawn from the box without replacement. What is the probability that one ball of each coloring is selected? <br> That is: I think two balls are drawn. \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 4 - discrete random variables, section 7 - discrete distribution(playing card experiment), stats lab 4.1 | Under Student Learning Outcomes: <br> Insert new bullet after "discrete distribution": The student will compare technology-generated simulation and a theoretical distribution. <br> Under Supplies: | accepted change | Other |


|  | Insert new bullet after "regular dice": one programming calculator <br> Under Procedure: <br> Replace "procedure" with: Procedure for empirical data <br> Under Organize the Data: Replace "Record the number of diamonds picked for your class in Table 4.16" with: Record the number of diamonds picked for your class with playing cards in Table 4.16. <br> Under Discussion Question: <br> 1. Replace "theoretical and empirical" with "theoretical, empirical, and simulation" <br> 2. Replace "theoretical and empirical" with <br> "theoretical, empirical, and simulation" <br> 3. Replace "the data" with: the two sets of data <br> 4. Replace "Table 4.16 or <br> Table 4.17" with: Table <br> 4.16, Table 4.17, or Table <br> 4.18 <br> 5. Replace "table" with: table(s) |  |  |
| :---: | :---: | :---: | :---: |
| Ch 4: Discrete <br> Random Variables, End of Ch Practice Exercises | page 232 the example has the wrong addition. <br> Also, (can't find the page as another instructor borrowed my book) but form the web in Ch 4 homework People visiting video rental stores often rent more than one DVD at a time. | Our reviewers accepted this change. | Typo |


|  | The probability distribution for DVD rentals per customer at Video To Go is given in the following table. There is a five-video limit per customer at this store, so nobody ever rents more than five DVDs. x P(x) <br> 00.03 <br> 10.50 <br> 20.24 <br> 3 <br> 40.70 <br> 50.04 <br> There must be a typo in the probabilities. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 4: Discrete Random Variables, Section: Geometric Distribution, Ch Review | It has the wrong formula for the mean of the geometric distribution. <br> It should be mean $=1 / p$. <br> It shows the formula for the standard deviation but says its the mean. | Our reviewers accepted this change. | Typo |
| Ch 4: Discrete Random Variables, Section: Geometric Distribution, Try It 4.21 | In Sec. 4.4 in the solution to the "Try It" Exercise regarding the literacy rate for women in Afghanistan, the mean should be 8.333, not 3333 . i.e. $1 / .12$ is approximately 8.333. <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 4: Discrete Random Variables, Section: Probability Distribution Function (PDF) for a Discrete Random Variable, Try It 4.1 | In Sec. 4.2 in the solution to the "Try It" Exercise regarding the expected number of times the average post-op patient will ring the nurse, $1(4 / 50)$ should be $1(8 / 50)$. Also, the expected value should be 2.32, not 2.24. | Our reviewers accepted this change. | Typo |


|  | \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 5 - continuous random variables, homework - problem 76 | Delete "at St. Helena <br> Hospital" in problem 76 | accepted change | Other |
| Ch 5 - continuous random variables, homework - problem 77 | Delete "on the Red Line" in problem 77 | accepted change | Other |
| Ch 5 - continuous random variables, section 1 - continuous probability functions, under figure 5.7 | AREA $=(15-4)(1 / 20)=-.55$ is shown twice. delete the second line; it is a repeat. | accepted change | Other |
| Ch 5 - continuous random variables, section 1 - continuous probability functions, under figure 5.8 | Rewrite as $\mathrm{P}(\mathrm{X}<=\mathrm{x})$, which can also be written as $P(X<x)$ for continuous distributions, is called the ..." <br> Insert "also" after "can." | accepted change | Other |
| Ch 5 - continuous random variables, section 1 - continuous probability functions, under figure 5.9 | Italicize the variables x and y for the axes | accepted change | Other |
| Ch 5 - continuous random variables, section 2 - the uniform distribution, example 5.3 | in example 5.3: <br> under Solution 5.3 for figure 5.11, delete a. Find $P(2<x<18)$ and remove the parentheses from the solution (16/23) <br> under solution 5.3 for figure 5.12, Add a period after 0.90 <br> under solution 5.3 for figure 5.13, move "for $8<x<23$ " up to the previous lie. Remove the parentheses around (11/15) | accepted change | Other |


|  | Change figure 5.14 |  |  |
| :---: | :---: | :---: | :---: |
| Ch 5 - continuous random variables, section 2 - the uniform distribution, example 5.4 | Under solution 5.4 c , italicize $k$ in the first line as well as the 5th line | accepted change | Other |
| Ch 5 - continuous random variables, section 2 - the uniform distribution, example 5.5 | Under solution 5.5, b. : change (see Example 5.2) to (see Example 5.3) <br> Under figure 5.17, replace "?" with 4/5 | accepted change | Other |
| Ch 5 - continuous random variables, section 2 - uniform distribution, first paragraph of the section | Add "of endpoints" at the end of the paragraph. | accepted change | Other |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, 3rd Ch | Rewrite this last part as "Exponential distributions are commonly used in calculations of product reliability, or the length of time a product lasts." | accepted change | Other |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, example 5.11 | under solution 5.11: <br> d, replace (-5)(0.5) exponents to $(-0.5)(5)$ in both cases | accepted change | Other |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, example 5.11 | under solution 5.11c, change $1-e(-0.5 x)^{\wedge}$ e to $1-$ $\mathrm{e}^{\wedge}(0.5)(\mathrm{x})$ | accepted change | Other |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, example 5.12 | in example 5.12 under the calculator section, replace the 2 to 3 in both instances | accepted change | Other |
| Ch 5 - continuous random variables, | under solution 5.13 b , put the parentheses around -4 | accepted change | Other |


| section 3 - the exponential distribution, example 5.13 | and 1/6 |  |  |
| :---: | :---: | :---: | :---: |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, example 5.7 | Put the negative sign of the exponent -(0.25) inside the parentheses | accepted change | Other |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, example 5.8 | in a. , change exercise 5.0 to exercise 5.7 <br> under solution 5.8 a, make the $(-0.25)(5)$ of $\mathrm{e}(-0.25)(5)$ to be exponents | accepted change | Typo |
| Ch 5 - continuous random variables, section 3 - the exponential distribution, under memorylessness of the exponential distribution | replace has with have in the 2nd paragraph after five minutes | accepted change | Other |
| Ch 5, Ch review, section 5.3 the exponential distribution | Change PX to X . <br> Change ( $X=k$ ) to $P(X=k)$. | accepted change | Other |
| Ch 5, formula review, section 2 - the uniform distribution | last formula of the section for k! : Insert asterisk after ( $k-3$ ) and use minus signs here. | accepted change | Other |
| Ch 5, key terms, term Uniform Distribution | key term Uniform Distribution: Delete this second line, since "rectangular distribution" wasn't used in the Ch. | accepted change | Other |
| Ch 5: Continuous Random Variables, End of Ch Practice Exercises | In Sec. 5.2 in the solution to the Exercise regarding the truck driver: In the solution for 'a', 500/400 should be $50 / 400$. In the solution for 'b', 700 650 should be 650-400. | Our reviewers accepted this change. | Typo |


|  | \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 5: Continuous Random Variables, End of Ch Practice Exercises | In Sec. 5.2 in the solution to the Exercise regarding the Red line, the solutions from 'c' onward are labeled improperly. 'c' should say "Check students solution." And the answers now labeled 'c' through ' h ' should, instead, be labled 'd' through 'i'. <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 5: Continuous Random Variables, Section: The Exponential Distribution, Example 5.7 | In Sec. 5.3 in the example about the postal clerk, I read: <br> For example, $f(5)=$ $0.25 \mathrm{e}^{\wedge}(?(0.25)(5))=0.072$. <br> The postal clerk spends five minutes with the customers. <br> The sentence, "The postal clerk spends five minutes with the customers." Does not make sense here. I think it should be,"In other words, the function has a value of .072 when $x$ = 5 ." <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 5: The Uniform Distribution | Figure 4 needs to be replace. | Our reviewers accepted this change. | Other |
| Ch 6 - the normal distribution, glossary, term Normal Distribution | Change the $m$ in the formula "-(x-m)" to a greek letter mu. The formula should match the one at the top of page 342 . | accepted change | Other |
| Ch 6 - the normal distribution, section introduction | in the 3rd paragraph, Change "(two numerical descriptive measures), the mean" to: (two numerical descriptive measures): the mean | accepted change | Other |


| Ch 6 - the normal distribution, section introduction, under figure 5.2 | the first paragraph under figure 5.2: change "the curve is symmetrical" to "the curve is symmetric" | accepted change | Other |
| :---: | :---: | :---: | :---: |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution | in the second paragraph of the section, change "the value $x$ comes from" to "the value $x$ in the given equation comes from" | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, after try it 6.2 | Under the Empirical Rule, Change "the Empirical Rule says the following" to: the Empirical Rule states the following" | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.1 | in example 6.1, Delete the sentence "The standard deviation is $s=6 "$ | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.1 | in example 6.1, Set $x$ in uppercase so that "This says that x is a normally distributed random variable" becomes: This says that X is a normally distributed random variable | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.2 | Insert space before the parenthesis so that "the amount of weight lost(in pounds)" becomes: the amount of weight lost (in pounds) <br> Insert "c." before "Suppose the random variables $X$ and Y" <br> Insert header: "Solution 6.2" before the equation " $z$ = $y$-u/s". Label the equation "c.". | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal | change solution 6.3b: <br> Change "177.98" to: 177.98 cm | accepted change | Other |


| distribution, example $6.3$ |  |  |  |
| :---: | :---: | :---: | :---: |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.4 | in example 6.4, <br> Add the following after " $\mathrm{y}=$ 162.58 cm ": as they compare to their respective means and standard deviations $\begin{aligned} & \text { Change "x=160.58" to: } x \text { - } \\ & 160.58 \mathrm{~cm} \\ & \text { Change " } y=162.85 \text { " to: } y= \\ & 162.85 \mathrm{~cm} \end{aligned}$ | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.5 | Change "About 68\% of the $x$ values lie between" to: About 68\% of the $x$ values lie within one standard deviation of the mean. Therefore, about 68\% of the $x$ values lie between" <br> Change "within one standard deviation of the mean 50" to: within one standard deviation from the mean 50 <br> Change "About 95\% of the $x$ values lie between" to: About 95\% of the $x$ values lie within two standard deviations of the mean. Therefore, about 95\% of the $x$ values lie between" <br> Change "within two standard deviations of the mean 50" to: within two standard deviations from the mean 50 <br> Change "About 99.7\% of | accepted change | Other |


|  | the $x$ values lie between" to: About $99.7 \%$ of the $x$ values lie within three standard deviations of the mean. Therefore, about $95 \%$ of the $x$ values lie between" <br> Change "within three standard deviations of the mean 50" to: within three standard deviations from the mean 50 |  |  |
| :---: | :---: | :---: | :---: |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, example 6.6 | Change "166.02 and 178.7 " to: 166.02 cm and 178.7 cm <br> Change "159.68 and 185.04" to: 159.68 cm and 185.04 cm <br> Change "153.34 and 191.38 " to: 1153.34 cm and 191.38 cm | accepted change | Other |
| Ch 6 - the normal distribution, section 1 - the standard normal distribution, try it 6.4 | try it 6.4: <br> Add the following after "x2 = 366.21": as they compare to their respective means and standard deviations | accepted change | Other |
| Ch 6 - the normal distribution, section 2 - using the normal distribution, example 6.10 | Delete the sentence "There are approximately one billion smartphone users in the world today." | accepted change | Other |
| Ch 6 - the normal distribution, section 2 <br> - using the normal distribution, example 6.11 | under solution 6.11: $\begin{aligned} & \text { Change "IQR = Q3 - Q1 = } \\ & 18.7508 \text { " to: IQR = Q3 - Q1 } \\ & =18.8 \end{aligned}$ <br> Replace the greater than sign in " $P(x>k)$ " with a greater than or equal to sign. <br> Change "k = 40.42" to: k= | accepted change | Other |


|  | 40.4 <br> Change "at least 40.42 years." to: at least 40.4 years. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 6 - the normal distribution, section 2 - using the normal distribution, example 6.11 | Delete the sentence "There are approximately one billion smartphone users in the world today." | accepted change | Other |
| Ch 6 - the normal distribution, section 2 <br> - using the normal distribution, example 6.12 | Change "at most 6.15 cm ." to: at most 6.16 cm . | accepted change | Other |
| Ch 6 - the normal distribution, section 2 - using the normal distribution, example 6.8 | Under solution 6.8a, Add a period after "where $u=63$ and $\mathrm{s}=5^{\prime \prime}$ | accepted change | Other |
| Ch 6 - the normal distribution, section 6.1 formula review | Delete the line " $\mathrm{Z} \sim \mathrm{N}(0,1)$ " <br> Change the K to lowercase so that the line "To find the Kth percentile of $X$ " reads: To find the kth percentile of $X$ | accepted change | Other |
| Ch 6: The Normal Distribution, Sec 1: The Standard Normal Distribution, Exercise 63 | Section 6.1, \#63c - the player's height would be 79 $+3.5(3.89)=92.615$ inches tall (not 90.67). | Revise the solution to part c to "Height = 79 + 3.5(3.89) = 92.615 inches, which is taller than 7 feet, 8 inches. There are very few NBA players this tall so the answer is no, not likely. | Incorrect calculation or solution |
| Ch 6: The Normal Distribution, Sec 2: Using the Normal Distribution, Exercise 73 | The solution to \#73d is missing. | Delete part d from the question. | Incorrect calculation or solution |
| Ch 6: The Normal Distribution, Section: The Standard Normal Distribution, Try It 6.4 | In Sec. 6.1 in the "Try It" exercise about the 2012 SAT verbal scores, the solution gives the same zscore for both students. z1 | Our reviewers accepted this change. | Typo |


|  | is incorrect; it should be 1.5. <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 6: The Normal Distribution, Section: Using the Normal Distribution, Example 6.8 | In Sec. 6.2 in the example exercise about finding the probability that a randomly selected student scored more than 65 on the exam, I think the solution shown does not make sense and has many problems. <br> For the answer, I get 1 - $.6554=.3446 .$ <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 6: The Normal Distribution, Section: Using the Normal Distribution, Try It 6.11 | In Sec. 6.2 in the "Try It" exercise about 2000 students taking an exam, the solution to 'a' shows the 75th percentile as 91.9, but that should be 91.1. The solution to 'b' properly shows 91.1. <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 6: The Normal Distribution, Section: Using the Normal Distribution, Try it 6.12 | In Sec. 6.2 in the "Try It" exercise about mandarin oranges, the solution to 'a' uses an area of 40 , but the question says "middle $45 \%$ ". I think that should be "middle 40\%". To me, the solution to 'b' makes no sense at all. <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 6: The Normal Distribution, Section: Using the Normal Distribution, Try It 6.8 | In Sec. 6.2 in the "Try It" exercise about the golf scores, the solution shows normalcdf(10^(99),65,68,3) $=0.1587$. <br> The $10^{\wedge}(99)$ is incorrect. I got the correct answering using zero instead of 10^(99), but the TI "STAT | Our reviewers accepted this change. | Typo |


|  | WIZARDS" use -1E99 instead, and that will work. Note that 10^(99) does not equal -1E99. -1E99 does equal -1*10^(99). <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 7 THE CENTRAL LIMIT THEOREM, Section 7.1 The Central Limit Theorem for Sample Means (Averages), 3rd paragraph | Delete comma in "that equals the original variance divided by, the sample size." so that it reads: that equals the original variance divided by the sample size. | Accepted change. | Typo |
| Ch 7 THE CENTRAL LIMIT THEOREM, Section 7.2 The Central Limit Theorem for Sums, Try It 7.7 | Change "table use" to: tablet user | Accepted change. | Typo |
| Ch 7 THE CENTRAL LIMIT THEOREM, Section 7.3 Using the Central Limit Theorem, Practice \#93 | For item 93b, change "the standard deviation of the sum the of the weights." to: the standard deviation of the sum of the weights. | Accepted change. | Typo |
| Ch 7: The Central Limit Theorem, End of Ch Practice Exercises | In Sec. 7.2 I read: Use the following information to answer the next four exercise: An unknown distribution has a mean 12 and a standard deviation of one. A sample size of 25 is taken. Let $X=$ the object of interest. <br> The word "exercise" should be "exercises". <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 7: The Central Limit Theorem, Sec 1: The Central Limit Theorem for Sample Means (Averages), Exercise 65 | Solutions to \#65 part e and part f. In part d, the correct distribution is $N(2.75, .066)$, but this distribution was not used in the calculation of part e \& f . | Revise parts e and fas follows: <br> e. Find the first quartile for the average song length, X-bar. <br> f. The IQR(interquartile range) for the average song length, X -bar, is from | Incorrect calculation or solution |


|  |  | Revise the solution as follows: <br> e. 2.71 minutes <br> f. 0.09 minutes |  |
| :---: | :---: | :---: | :---: |
| Ch 7: The Central Limit Theorem, Sec 2: <br> The Central Limit Theorem for Sums, Example 7.6 | sqrt(50)*15 rounded to two decimal places is 106.07 not 106.01 as typed. | Revise the solution to Example 7.6 part a from "106.01" to "106.07". | Typo |
| Ch 7: The Central Limit Theorem, Section: Introduction | On page 374, there is a significant error in bold type: <br> In either case, it does not matter what the distribution of the original population is, or whether you even need to know it. The important fact is that the distribution of sample means and the sums tend to follow the normal distribution. <br> This statement should be rewritten or removed, as it is false. Most introductory texts do not state the CLT correctly, suggesting what you said by their omission, but to say this untrue thing is even worse. <br> --submitted via ZenDesk | Our reviewers accepted this change. |  |
| Ch 7: The Central Limit Theorem, Section: The Central Limit Theorem for Sample Means (Averages), 2nd paragraph | In Sec. 7.1, a comma must be removed from this sentence: <br> The normal distribution has the same mean as the original distribution and a variance that equals the original variance divided by, the sample size. | Our reviewers accepted this change. | Typo |


|  | Also, I recommend adding this sentence at the end of the paragraph: <br> Since the standard deviation of the sampling distribution is the square root of its variance, the standard deviation of the sampling distribution is the standard deviation of the original distribution divided by the square root of $n$. <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 7: The Central Limit Theorem, Section: The Central Limit Theorem for Sample Means (Averages), Example 7.7 | In Sec. 7.2 in the Example Exercise about app engagement times, I think the complete sentence for the interpretation of the answer to par 'b' is incorrect. <br> It says: <br> Ninety five percent of the app engagement times are at most 587.76 minutes. <br> It should say: Ninety five percent of the sums of app engagement times are at most 587.76 minutes. <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 7: The Central Limit Theorem, Section: The Central Limit Theorem for Sample Means (Averages), exercise 65 | Ch 7, homework problem \#65 has the wrong answer. The standard error of the mean should be 0.066 rather than 0.0220 in part (d). That is, the answer to (d) should be $\mathrm{N}(2.75$, 0.0660) | Our reviewers accepted this change. |  |
| Ch 7: The Central Limit Theorem, Section: Using the | In Sec. 7.3 in the Example about the stress study, I read: | Our reviewers accepted this change. | Typo |


| Central Limit <br> Theorem, Example 7.8 | For problems 1. and 2., let This should say <br> For problems a and b, let <br> Also, where $\mathrm{n}=75$ is confusing because $n$ does not appear in the preceding equation. Perhaps in the preceding equation, sqrt(75) should be sqrt(n). <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 7: The Central Limit Theorem, Section: Using the Central Limit Theorem, exercise 97 | In Sec. 7.3, the Homework Exercise about coins needs expert attention. <br> The solution seems to be answering this question, which is not asked: If we randomly choose 280 coins, what is the probability that the mean of the masses of those coins will be in the range 5.111 g to 5.291? <br> To answer the question that *is* asked, we must know something about the original distribution. Assuming that it is a normal distribution, we would expect (1normalcd(5.111, 5.291, $5.201, .065) * 280=47$ coins to be rejected. This makes sense because the $z$-score for 5.111 is -1.38 and $z-$ score for 5.291 is 1.38 . <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 7: The Central Limit Theorem, Section: Using the | In Sec. 7.3 in the "Try It" Example about blood pressure, the answer to ' b ' | Our reviewers accepted this change. | Typo |


| Central Limit <br> Theorem, Try It 7.10 | has a problem: <br> The 'normalcdf' calculator command is shown with only three parameters, but it requires four parameters. <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 7: The Central Limit Theorem, Section: Using the Central Limit Theorem, Try It 7.10 | In Sec. 7.3 in the "Try It" Example about blood pressure, the answer to 'a' has two problems: <br> 1. The second parameter for the 'normalcdf' calculator command should not be 99. <br> 2. The probability that blood pressure for one woman is greater than 120 mm Hg cannot possibly be as low as 0.0272 . The b.p. of 120 is not even one s.d. away from the mean. <br> \{gc\} | Our reviewers accepted this change. |  |
| Ch 7: The Central Limit Theorem, Section: Using the Central Limit Theorem, Try It 7.11 | In Sec. 7.3 in the "Try It" Exercise about the Boeing 757, two small changes would improve the question. The first part of the question now says: <br> According to Boeing data, the 757 airliner carries 200 passengers and has doors with a mean height of 72 inches. Assume for a certain population of men we have a mean of 69.0 inches and a standard deviation of 2.8 inches. <br> a. What mean doorway height would allow $95 \%$ of | Our reviewers accepted this change. | Typo |


|  | men to enter the aircraft without bending? <br> The changes are: <br> 1. Replace "men we have a mean of 69.0 inches" with "men we have a mean height of 69.0 inches". (In other words, add the word "height".) <br> 2. Replace "What mean doorway height" with "What doorway height". (In other words, remove the word "mean".) <br> ALSO: Is the 72 inch mean door height what is meant? Why is it "mean"? \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 8 CONFIDENCE INTERVALS, Section Introduction, Collaborative Exercise | Please replace formula with that in Patch_08_00_01 | Accepted change. | Other factual inaccuracy in content |
| Ch 8 CONFIDENCE INTERVALS, Section 8.2 A Single Population Mean using the Student t Distribution | CORRECTION: In Sec. 8.2, in the Try It Exercise about television watching, the second solution has a typo. The solution says, "The $98 \%$ confidence interval is (2.3965, 9,8702)." It should say, "The $98 \%$ confidence interval is (2.3965, 9.8702)." In other words, '9,8702' should be '9.8702'. | Our reviewers accepted this change. | Typo |
| Ch 8: Confidence Intervals, End of Ch Practice Exercises | In Sec. 8.2, in the Homework Exercise about unoccupied seats on airline flights, the solution to question '1a' (which, BTW, probably should be question '1' rather than ' 1 a ') is blank. <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 8: Confidence | In Sec. 8.2, in the | Our reviewers accepted | Typo |


| Intervals, End of Ch Practice Exercises | Homework Exercise about The Federal Election Commission (FEC), the table contains 30 entries, not 20 as stated in the problem. In other words: "The following table shows the total receipts during this cycle for a random selection of 20 Leadership PACs." needs to be changed to, "The following table shows the total receipts during this cycle for a random selection of 30 Leadership PACs." <br> \{gc $\}$ | this change. |  |
| :---: | :---: | :---: | :---: |
| Ch 8: Confidence <br> Intervals, End of Ch <br> Practice Exercises, 97 | In Sec. 8.1, the Homework Exercise about the time needed to complete tax forms has several problems. <br> 1. As shown in the attached screenshots, the numbering of the sections of the question is very strange (e.g. 3iii). <br> 2. Question 4d says, "Construct a 90\% confidence interval ..." The solution given is (22.228, 24.972), but this cannot possibly be correct because this corresponds to a z-score of 1.96 , which corresponds to a 95\% confidence interval. In other words 23.6-1.96 * (7/sqrt(100)) $=22.228$ and $23.6+1.96$ * $(7 / \operatorname{sqrt}(100))=$ 24.972. For a 90\% confidence interval, I get (22.449,24.751). | Our reviewers accepted this change. | Typo |


|  | 3. The EBM given in the solution also corresponds to a $95 \%$ confidence interval. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 8: Confidence Intervals, Introduction | The interpretation of confidence interval (CI) is not correct in the textbook. In the current version, CI is interpreted as a range of scores (statistics) in which the population parameter will likely to lie between. This is a common wrong interpretation. Instead, a CI should be defined as a range of scores (statistics) that is constructed based on a sample, among other CIs over repeated sampling, may or may not contain the population parameter. <br> I hope that the Ch on CI could be revised accordingly. | Our reviewers accepted this change. |  |
| Ch 8: Confidence <br> Intervals, Section: A <br> Population <br> Proportion, Try It 8.11 <br> b. | In Sec. 8.3, in the "Try It" Exercise about ownership of iPods and smart phones, both solutions (A and B) are incorrect. In Solution A, the factor of 2.17 was dropped just before approximating EPB. EPB should be 2.17*. 0269 = .0584; this error effects calculations that follow. In Solution B, the answer given is the same wrong one found in Solution A, but entering the numbers as shown will give a confidence interval of ( $0.62156,0.73844$ ), which is correct. | Our reviewers accepted this change. |  |


|  | Apparently, the incorrect result from Solution A was transferred to Solution B. <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 8: Confidence <br> Intervals, Section: A <br> Population <br> Proportion, Try It 8.14 | In Sec. 8.3, in the "Try It" Exercise about an Internet marketing company determining the percentage of customers who click on ads on their smartphones, the solution has an extra, confusing phrase. <br> The solution says, "271 customers should be surveyed.Check the Real Estate section in your local" It should simply say, "271 customers should be surveyed." <br> \{gc\} | Our reviewers accepted this change. | Typo |
| Ch 8: Confidence <br> Intervals, Section: A <br> Single Population <br> Mean using the <br> Student t Distribution | In Sec. 8.2, here are two minor typos. <br> 1. In the sentence, "Up until the mid-1970s, some statisticians used the normal distribution approximation for large sample sizes and only used the Student's t-distribution only for sample sizes of at most $30 . "$, the first 'only' needs to be removed. In other words, the sentence should read, "Up until the mid-1970s, some statisticians used the normal distribution approximation for large sample sizes and used the Student's t-distribution only for sample sizes of at most 30." | Our reviewers accepted this change. | Typo |


|  | 2. In the sentence that begins. "If you draw a simple random sample of size n from a population that has an approximately a normal distribution ..." The last 'a' shown here should be removed. In other words, the sentence should begin, "If you draw a simple random sample of size n from a population that has an approximately normal distribution ..." |  |  |
| :---: | :---: | :---: | :---: |
| Ch 8: Confidence Intervals, Section: A Single Population Mean using the Student t Distribution, Try It 8.8 | In Sec. 8.2, in the Try It <br> Exercise about hypnotherapy, "hours" is misspelled as "hourse". In other words: "You do a study of hypnotherapy to determine how effective it is in increasing the number of hourse of sleep subjects get each night." Should be "You do a study of hypnotherapy to determine how effective it is in increasing the number of hours of sleep subjects get each night." | Our reviewers accepted this change. | Typo |
| Ch 8: Confidence Intervals, Solution Guide | In Sec. 8.2, in the Homework Exercise about The Federal Election Commission (FEC), the solution using the TI-83/TI$84+$ will work, but it is much more complicated than needed. The exercise gives the mean of the samples, the sample std. dev., the number of samples (30), and the desired confidence level. The student does not need | Our reviewers accepted this change. |  |


|  | to laboriously enter the 30 data values. Instead the student can "Arrow to Stats" rather than "Arrow to Data" and then enter just the mean, the sample std. dev., the number of samples, and the desired confidence level. <br> \{gc\} |  |  |
| :---: | :---: | :---: | :---: |
| Ch 8: Confidence Intervals, Solution Guide | In Sec. 8.1, the Homework Exercise about the height of male Swedes has several problems. <br> 1. The problem states a standard deviation of 2.8, but answer a., ii. lists it as 3. <br> 2. The answer given for d., i. has two problems. First, it does not correspond to the values shown on the drawing in d., ii. Second, the numbers don't make sense. For a standard deviation of 3 , the Cl is (70.15, 71.85), not (70.151, 71.49). For a standard deviation of 2.8 , the Cl is (70.20, 71.79), which also does not match d., i. <br> 3. The drawing in d., ii is correct for a standard deviation of 3, but not for a standard deviation of 2.8. <br> 4. The question is about male Swedes, but answer b. twice refers to them as Swiss males! <br> \{gc\} | Our reviewers accepted this change. |  |


| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.1 Null and Alternative Hypotheses, The null hypothesis | Suggest rewriting this definition as "It is a statement of no difference between sample means or proportions or no difference between a sample mean or proportion and a population mean or proportion. In other words, the difference equals 0.1 | Accepted change. | Other factual inaccuracy in content |
| :---: | :---: | :---: | :---: |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.3 Distribution Needed for Hypothesis Testing, first paragraph | Delete "or the sample size is large" | Accepted change. | General/pe dagogical suggestion or question |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.3 Distribution Needed for Hypothesis Testing, Practice \#22 | Insert "population," before "standard deviation." Replace last sentence with "Assume a normal distribution, with $\mathrm{n}>=30$." | Accepted change. | Other |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.4 Rare Events, the Sample, Decision and Conclusion, Practice \#44 | Reword to insert sigma symbol for the words, "the population standard deviation." | Accepted change. | Other |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.5 Additional Information and Full Hypothesis Test Examples, Example 9.15 | Replace first 2 sentences with "A college football coach records the mean weight that his players can bench press as 275 pounds, with a standard deviation of 55 pounds." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 9 HYPOTHESIS TESTING WITH ONE <br> SAMPLE, Section 9.5 Additional Information and Full Hypothesis Test Examples, | Replace "statistics" with "statistic." | Accepted change. | Typo |


| HISTORICAL NOTE (EXAMPLE 9.11) |  |  |  |
| :---: | :---: | :---: | :---: |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section 9.5 Additional Information and Full Hypothesis Test Examples, Try It 9.14 | Delete this 'a,' before "Marco." | Accepted change. | Typo |
| Ch 9 HYPOTHESIS TESTING WITH ONE SAMPLE, Section Introduction, Hypothesis Testing key term | Remove the space after the ". | Accepted change. | Typo |
| Ch 9: Hypothesis Testing with One Sample, Sec 5: Additional Information and Full Hypothesis Test Examples, Try It 9.12 | In section "9.5 Additional Information and Full Hypothesis Test Examples" of the online version of the book, there is a "Try It" problem about a righttailed test. When you click the "Show Solution" button, an image appears that shows a left-tailed test. The normal distribution should be shaded to the right like the example above it. I am attaching a screenshot of the problem. | Revise the figure in the solution to Try It 9.12 to show a right-tailed test. | Incorrect calculation or solution |
| Ch 9: Hypothesis Testing with One Sample, Section: Additional Information and Full Hypothesis Test Examples, Try It 9.14 | Section 9.5, the fourth TryIt, that states: <br> "The mean throwing distance of a football for a Marco, a high school freshman quarterback, is 40 yards, with a standard deviation of two yards. The team coach..." <br> In the online version of the text, the described answer process using the TIcalculator STAT\|TESTS|1:ZTest and the given solution | Our reviewers accepted this change. |  |


|  | for the Try-It do not agree. If you use the calculator to find the answer, the calculator test value and p value are $z=11.18033989$ and $\mathrm{p}=2.611524 \mathrm{E}-29$. The solution displayed when the [Show Solution] is clicked is $\mathrm{p}=0.0062$. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 10 HYPOTHESIS TESTING WITH TWO SAMPLES, Section 10.1 Two Population Means with Unknown Standard Deviations, Example 10.1 | Remove the square root symbol for 0.866 . | Accepted change. | Incorrect calculation or solution |
| Ch 10: Hypothesis Testing with Two Samples, Sec 2: Two Population Means with Known Standard Deviations, Example 10.7 | Example 10.7 in the book gives a p-value of 0.4040 , and I keep getting 0.4955. | Revise the solution to Example 10.7 to show "0.4955" as the p-value. Update Figure 10.6 to match. | Incorrect answer, calculation, or solution |
| Ch 10: Hypothesis Testing with Two Samples, Section: Two Population Means with Unknown Standard Deviations, Example 10.1 | Hello <br> I am a student who is studying statistics. <br> I encounter that solution that I can not figure out why I have to put this number in my calculator <br> Problem is this: <br> screen shot 1 <br> And solution by using calculator is this: <br> screen shot 2 <br> I think first sample mean is just 0.866, not? 0.866 . | Our reviewers accepted this change. | Typo |


| Ch 10: Hypothesis Testing with Two Samples, Section: Two Population Means with Unknown Standard Deviations, Example 10.1 | On Page 564, p-value = 0.0054 has $1 / 2(p$-value $)=$ 0.0028 . | Our reviewers accepted this change. | Typo |
| :---: | :---: | :---: | :---: |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.2 Goodness-of-Fit Test, Example 11.2 | Replace text "The results were distributed as in Table 11.6" to "The results were distributed as in Table 11.7". | Accepted change. | Other factual inaccuracy in content |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.2 Goodness-of-Fit Test, Homework \#73 | Change text Table 11.36 to Table 11.35 . | Accepted change. | Other factual inaccuracy in content |
| Ch 11 THE CHI- <br> SQUARE <br> DISTRIBUTION, <br> Section 11.2 <br> Goodness-of-Fit Test, <br> Homework \#85 | These percentages do not add up to 100 . You can delete the 499 sample size. Suggest making second column Obese-Expected, in percentages and making third column ObeseObserved, and making these frequencies. The Obese-Expected percentages could be 22.4\%, 18.6\%, 12.8\%, $10.4 \%$, and $35.8 \%$. The Obese-Observed Frequencies could be 122, 104, 78, 64, and 168, respectively. Then, part e solution would change to 507.6 for the test statistic. The rest of the solution will stay the same. | Accepted change. | Other factual inaccuracy in content |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.2 Goodness-of-Fit Test, Solutions \#19 | Replace 88,621 with 2016.136. | Accepted change. | Incorrect calculation or solution |


| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.2 Goodness-of-Fit Test, Solutions \#77 | Replace "fit" with "do not fit". | Accepted change. | Incorrect calculation or solution |
| :---: | :---: | :---: | :---: |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.2 Goodness-of-Fit Test, Try It 11.2 | Replace 46 with 56. | Accepted change. | Other |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.3 Test of Independence, Homework \#100 | Replace text in table: <br> 84 with 94 <br> 71 with 81 <br> 272 with 326 <br> 1171 with 1235 | Accepted change. | Other |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.4 Test for Homogeneity, Example 11.8 | Change Table 11.18 to Table 11.19 in question. | Accepted change. | Other factual inaccuracy in content |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.4 Test for Homogeneity, Example 11.9 | Change Table 11.20 to <br> Table 11.21 in question. | Accepted change. | Other factual inaccuracy in content |
| Ch 11 THE CHISQUARE DISTRIBUTION, Section 11.4 Test for Homogeneity, Homework \#105 | Replace text in table: <br> 45,011 with 20,965 <br> 20,965 with 45,011 | Accepted change. | Other |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.1 Linear Equations, Example 12.2 Figure 12.2 | [Replace figure with Ch_12_Patch_01] | Accepted change. | Other factual inaccuracy in content |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section | Replace each instance of "AIDS" with "flu." | Accepted change. | General/pe dagogical suggestion |


| 12.1 Linear Equations, Practice |  |  | or question |
| :---: | :---: | :---: | :---: |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.1 Linear Equations, Practice \#9 | Replace AIDS with flu. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.4 Testing the Significance of the Correlation Coefficient, Example 12.8 | Change to $r=-0.624$ and -$0.624<-0.532$. | Accepted change. | Incorrect calculation or solution |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice \#36 | In all cases, replace "AIDS" with "flu." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice \#38 | Delete $\mathrm{a}, \mathrm{b}, \mathrm{c}$, and n and change stem to "Find the correlation coefficient," since these are assessed in 37. | Accepted change. | Other |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice \#41 | Replace AIDS with flu. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice \#48 | Replace AIDS with flu. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice \#50 | Delete $\mathrm{a}, \mathrm{b}$, and d from 50. Change stem to "Find the correlation coefficient." | Accepted change. | Other |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.5 Prediction, Practice Table 12.14 | Replace AIDS with flu. | Accepted change. | General/pe dagogical suggestion or question |


| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.6 Outliers, Ch review | Insert space after y2. | Accepted change. | Typo |
| :---: | :---: | :---: | :---: |
| Ch 12 LINEAR REGRESSION AND CORRELATION Section 12.6 Outliers, Ch review | Change to $y 2=a+b x+2 s$ and $y 3=a+b x-2 s$. | Accepted change. | Incorrect calculation or solution |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.1 Linear Equations, REFERENCES | Remove HIV and STD. Replace with agency reporting flu cases. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.4 Testing the Significance of the Correlation Coefficient, \#67, 68 | Delete 67 and 68; they are duplicates. <br> 67. If the level of significance is 0.05 and the p -value is 0.06 , what conclusion can you draw? 68. If there are 15 data points in a set of data, what is the number of degree of freedom? | Accepted change. | Other |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.5 Prediction | Change "AIDS" to "flu cases". | Our reviewers accepted this change. | Typo |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.5 Prediction, REFERENCES | Remove HIV and STD. Replace with agency reporting flu cases. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.5 Prediction, Solutions \#69 | Since there isn't a linear relationship, delete e and g. Part f can remain, but the correct answer should state, "There is not a linear relationship between the two variables, as evidenced by a p -value greater than 0.05." | Accepted change. | Other |
| Ch 12 LINEAR REGRESSION AND | Since there is not a significant linear | Accepted change. | Other factual |


| CORRELATION, 12.5 Prediction, Solutions \#71 | relationship between the variables, delete part e. Also, delete g, h, and i. Interpreting the slope of the least-squares regression line does not make sense, since there is not a significant linear correlation. |  | inaccuracy <br> in content |
| :---: | :---: | :---: | :---: |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.5 Prediction, Solutions \#73 | Delete $f$ and $h$, since there is not a significant correlation. <br> f. 6; 5 <br> h. current year: 2013: 3.55 or four letters; this is not an appropriate use of the least squares line. It is extrapolation. | Accepted change. | Other factual inaccuracy in content |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.5 Prediction, Solutions \#73 | Insert "The r-value indicates that there is not a significant correlation between the year the state entered the union and the number of letters in the name." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, BRINGING IT TOGETHER: HOMEWORK \#80 | Replace with "Number of Family Members Attending College." throughout question \#80. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, BRINGING IT TOGETHER: HOMEWORK \#80 | Replace first sentence with "The average number of people in a family that attended college for various years is given in Table 12.29." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, Solutions \#75 | The slope is -. 3031 . <br> The $y$-intercept is 31.93 . <br> Change 31\% to 32\%. <br> Change 50.238\% to <br> 57.52\%. <br> Change to $30.3 \%$. <br> Replace $r=0.71$ with $r=-$ . 7584. <br> Change -0.2723 to -. 2789 . | Accepted change. | Other |


|  | Change 30.606 to 30.9816. Change $y=-0.2723(70)+$ $30.606=0.115$ or $11.5 \%$ to $\mathrm{y}=-$ <br> .2789(70)+30.9816=0.114 or $11.4 \%$ new birds in the colony. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, Solutions \#77 | Change 1.6914 to -2.953 . Change 83.694 to 247.1616. | Accepted change. | Other factual inaccuracy in content |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, Solutions \#81 g | This is not an outlier. Change answer to No. | Accepted change. | Incorrect calculation or solution |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, Solutions \#85 h | Change to No. | Accepted change. | Incorrect calculation or solution |
| Ch 12 LINEAR REGRESSION AND CORRELATION, 12.6 Outliers, Solutions \#87 k | Change Alaska to Hawaii. Change 51 to 50, and change 656,424 to 10,932. | Accepted change. | Incorrect calculation or solution |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.3 The Regression Equation, The Correlation Coefficient $r$ "there is perfect negativecorrelation" | Insert a space here. | Accepted change. | Typo |
| Ch 12 LINEAR REGRESSION AND CORRELATION, <br> Section 12.5 <br> Prediction, Homework \#69 | Revise to show age groups. The correct table is shown in the solution section. | Accepted change. | Other factual inaccuracy in content |
| Ch 12 LINEAR REGRESSION AND CORRELATION, | Replace "alcohol" with "coffee." | Accepted change. | General/pe dagogical suggestion |


| Section 12.6 Outliers, Homework \#76 |  |  | or question |
| :---: | :---: | :---: | :---: |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.6 Outliers, Homework \#76 | Replace "wine consumption" with "coffee consumption." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.6 Outliers, Homework \#78 | Replace "the number of white males in the population and the homicide rate" with "population size and homicide rate." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.6 Outliers, Homework \#78 | Replace "non-white minorities commit a disproportionate number of homicides" with "population impacts homicide rate." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.6 Outliers, Homework \#78 Table | Replace "White Males" with "Population Size." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, Section 12.9 Regression (Fuel Efficiency), Stats Lab 12.3 | Replace the first two sentences with, "Find a reputable source that provides information on total fuel efficiency (in miles per gallon) and weight (in pounds) of new model cars with automatic transmissions." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12 LINEAR REGRESSION AND CORRELATION, <br> Section 12.9 Regression (Fuel Efficiency), Stats Lab 12.3 | Replace the first two sentences with, "Find a reputable source that provides information on total fuel efficiency (in miles per gallon) and weight (in pounds) of new model cars with automatic transmissions." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 12: Linear Regression and Correlation, Key | Brackets are too small in the formula for coefficient of correlation. | Ensure brackets are appropriately sized. | Other |


| Terms |  |  |  |
| :---: | :---: | :---: | :---: |
| Ch 12: Linear Regression and Correlation, Sec 6: Outliers, Exercise 75 | Solution for part c is incorrect. | In the solution for part c, revise "0.3179\%" to "30.3\%". | Other |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.1 One-Way ANOVA, The Null and Alternative Hypotheses 3rd paragraph | After "uk are not equal." add the sentence: That is, $\mu \mathrm{i} \neq \mu \mathrm{j}$ for some $\mathrm{i} \neq \mathrm{j}$. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.2 The F Distribution and the FRatio, in the first Note | After "beyond the level of this course." add sentence: It is preferable to use ANOVA when there are more than two groups instead of performing pairwise t-tests because performing multiple tests introduces the likelihood of making a Type 1 error. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.1 One-Way ANOVA, Homework | Change "The entries in the table are the driving times in minutes on the three different routes. The oneway ANOVA results are shown in Table 13.18." with: The entries in the Table 13.18 are the driving times in minutes on the three different routes. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.1 One-Way ANOVA, Key Terms | Add new bullet after "selected from each population": there is one independent variable and one dependent variable | Accepted change. | Other |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.2 The F Distribution and the FRatio, 9th bullet in the Calculation of Sum of | In the term "(sj)2/hj", set the j as a subscript so it reads: (sj)2/hj. (the jafter the $s$ is subscripted) | Accepted change. | Other factual inaccuracy in content |


| Squares and Mean |  |  |  |
| :--- | :--- | :--- | :--- |
| Square subsection |  |  |  |
| Ch 13 F |  | Other <br> DISTRIBUTION AND <br> factual <br> ONE-WAY ANOVA, |  |
| Section 13.2 The F |  |  |  |
| Distribution and the F- |  |  |  |
| Ratio, after Table 13.2 | Change "s3 = 15.7" to: s3 = |  |  |
| in Example 13.1 | 15.5 | Accepted change. | in content |


| ONE-WAY ANOVA, Section 13.3 Facts About the F Distribution, Solution \#64 | different": Ha: |  | suggestion or question |
| :---: | :---: | :---: | :---: |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.3 Facts About the F Distribution, Solution 13.2 | Change "Table 13.4" to: Table 13.5. | Accepted change. | Other |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.3 Facts About the F Distribution, Solutions \#68 | Change: "p-value $=0.001$ " <br> to: $p$-value $=0.0005$ | Accepted change. | Incorrect calculation or solution |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.3 Facts About the F Distribution, Solutions \#68 | Change " $\mu \mathrm{d}=\mu \mathrm{n}=\mu \mathrm{h}$ " to: $\mu \mathrm{c}=\mu \mathrm{n}=\mu \mathrm{h}$ | Accepted change. | Other factual inaccuracy in content |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.3 Facts About the F Distribution, Try It 13.2 | After "may not have MRSA" add the sentence: The data from the table is plotted in Figure 13.5. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, \#78 | Delete item 78. Adjust numbering for subsequent items. | Accepted change. | Other |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, Practice | Add the sentence after "if their variances are the same or different": Assume that commute times are normally distributed. | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F | Change "his scores are | Accepted change. | Other |


| DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, Practice | lower" to: his scores are more consistent. |  |  |
| :---: | :---: | :---: | :---: |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, Practice | Add the sentence after "the 10\% level": Assume that commute times are normally distributed. | Accepted change. | Other |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, Practice | Delete the phrase: "and that his commute time is shorter." | Accepted change. | General/pe dagogical suggestion or question |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.4 Test of Two Variances, Solution \#85 | Delete "26.272" | Accepted change. | Incorrect calculation or solution |
| Ch 13 F DISTRIBUTION AND ONE-WAY ANOVA, Section 13.5 Lab: OneWay ANOVA, Stats Lab 13.1 | Before "1. Compute the following:" insert new item <br> "1. State the null hypothesis and the alternative hypothesis." Adjust numbering of subsequent items | Accepted change. | Other |
| Ch 13: F Distribution and One-Way ANOVA, Sec 2: The F Distribution and the F Ratio, Example 13.1 | There are two typos in Example 13.1. In the first line, under the table, it says: $s 1=16.5, s 2=15, s 3=15.7$ <br> s3 should be equal to 15.5 <br> In the calculation of the SSbetween, directly below the table, s 3 is plugged into the formula as 5.5 squared instead of 15.5 squared. | Revise Example 13;1 as follows: <br> After Table 13.2, revise s3 from "15.7" to "15.5". <br> In the third equation of the calculations, revise " 5.5 " in the numerator to "15.5". | Typo |

