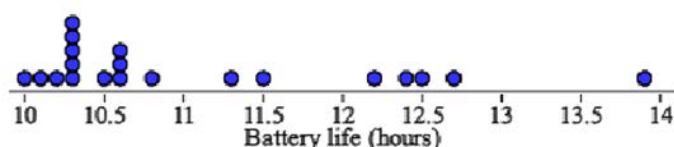


TPS 6e STUDENT EDITION Errata

- Page 104, Exercise 4: Part (b) should say that Joelle is at the **12th** percentile of the distribution.
- Page 269, Exercise 90: In options (a) and (b), change “several” to “**two or more**”.
- Page 284, Exercise 119: The next to last row of the two-way table should be labeled “**Strongly disagree**” instead of “Strongly agree”
- Page 323: In Figure 5.6(c), the label above the third diagram incorrectly shows the intersection symbol and should show the union symbol: **AUB**
- Page 349: In Exercise 71, add the sentence “Suppose we choose 1 member of the sample at random.” prior to “Are the events...”
- Page 376: Exercise 4 should read “Express the event “**Ana** scores...” (her name was misspelled)
- Page 383: About midway down the page, the left-hand side of the formula for calculating the standard deviation should say σ_v .
- Page 401: In Exercise 68, the last sentence should start “Find the probability that Barsha beats **Andrea**...”
- Page 443: In part (b) of the solution to the example, it should say “**Sample: the 20 randomly selected times.**”
- Page 451: Figure 7.6 should have 400 dots. Correction doesn’t affect shape, center, or variability of distribution, however.
- Page 555: In the Example Solution, add units to the parameter: “...where μ = the true mean weight (**in ounces**) of all pineapples grown in the field this year.”
- Page 556: In the Check Your Understanding, Question 2’s last sentence should say “We suspect that the **average time** it takes to complete the form...”
- Page 562: In the Check Your Understanding, Question 3 should say “Based on your answer to Question **2**, ...”
- Page 567: Exercise 34 parenthetical reference should be **(8.1)** not (8.2).
- Page 569, 2nd paragraph of narrative: In the sentence starting “Let’s check the condition...”, delete the word **virtual**.
- Page 606, Exercise 67: <Note the two numerical changes in the question stem and the corrected graph.> A tablet computer manufacturer claims that its batteries last an average of **11.5** hours when playing videos. The quality-control department randomly selects 20 tablets from each day’s production and tests the fully charged batteries by playing a video repeatedly until the battery dies. The quality-control department will discard the batteries from that day’s production run if they find convincing evidence that the mean battery life is less than **11.5** hours. Here are a dotplot and summary statistics of the data from one day:



- Page 608, Exercise 79: In part (a), line 2 should say “the true **mean** hardness μ of the tablets...”
- Page 610, Exercise 98: Line 8 should say “where μ = the **average** time...”
- Page 697, Exercise R10.7: In part (d), the second sentence should refer back to the test in **part (c)**.
- Page 802: About halfway through the Think About It, it should say say “ **$p = 3.04942$** ” rather than “ $b = 3.04942$.”
- Page 818: The word “Statistics” should be deleted from the second sentence of the introduction to exercises 12.57 and 12.58: Exercises 57 and 58 refer to the following setting. About 1100 high school teachers attended a weeklong summer institute for teaching AP® ~~Statistics~~ classes. After learning of the survey described in Exercise 56, the teachers in the AP® Statistics class wondered whether the results of the tattoo survey would be similar for teachers. They designed a survey to find out. The class opted to take a random sample of 100 teachers at the institute. One of the questions on the survey was: Do you have any tattoos on your body?

- 1.23(b) should read: **29/150 = 19.3% said they saw broken glass and 121/150 = 80.7% said that they did not.**
- 3.59(d) has the wrong units in two places. It should be in terms of **cups**, not ml.
- T4.6 should have **(d)** as the correct answer.
- 5.85: In the tree diagram, the bottom branch should say **Antibodies absent**, not present.
- Page 556 Check Your Understanding Question #2 solution should be modified to say “true mean amount of time **(in minutes)** it takes to complete the census form.
- 9.27(b) and (c) should state that the p-value is **24/200 = 0.12**, not $24/100 = 0.24$:
(b) Based on the simulation results, 24 of the **200** simulated trials yielded a sample proportion of 0.16 or greater, so the *P*-value is approximately **24/200 = 0.12**. Assuming that the true proportion of all students at Simon’s school that are left-handed is 0.10, there is a **0.12** probability of getting a sample proportion of 0.16 or greater just by chance in a random sample of 50 students. (c) Use $\alpha = 0.05$. Because the *P*-value of **0.12** $>$ $\alpha = 0.05$, we fail to reject H_0 . We do not have convincing evidence that the true proportion of all students at Simon’s school that are left-handed is greater than 0.10.
- 9.67 <Based on changes to exercise described above> (a) $H_0: \mu=11.5$; $H_a: \mu < 11.5$, where μ = the true mean battery life when playing videos for all tablets.
- 9.71(b) is missing the *P*-value interpretation. “**Assuming that the true mean SSHA score for older students is 115, there is a 0.0101 probability of getting a sample mean of at least 125.7 by chance alone.**”
- R9.2(b) should state “**Large Counts**” instead of “Normal/Large Sample”.
- R10.2: STATE: “**99% CI for...**” (Note that the rest of the problem is correct).
- R10.6(c) the STATE step should read “...using $\alpha = 0.01$ ” and the CONCLUDE step should read: “CONCLUDE: Because the *P*-value of $0.0382 > \alpha = 0.01$, **we fail to reject H_0** . There is **not** convincing evidence that the true mean difference in test scores for students like these who get the treatment message is greater than the true mean difference in test scores for students like these who get the neutral message.”
- R10.7(a) is missing a description of what the graph suggests about whether starting blocks are helpful. “**There is some evidence that starting blocks are helpful at improving 50-meter run times for sprinters like these. Seven of the 8 subjects ran the 50-meter dash faster using a starting block than from a standing start.**”
- 11.60 - The correct answer is **(b)**.