Errata for Calculus I, Second Edition

The following corrections will be made the next time Calculus I is reprinted. We are be grateful to those who provide additional corrections. Please communicate any new ones by sending e-mail to the authors.

Chapter R

Page 16, Example 4. $2x^2 - 4x - 6$ should be $2x^2 + 4x - 6$.

Page 39, Exercise 10. $36 - 8$ should be $36y - 8$.

Chapter 2

Page 106, Example 11. Replace "workers" by "worker hours." In the solution replace "productivity" by "production".

Page 108, Exercise 49. This should be worded as "A shoe repair shop can produce $20x - x^2 - 3$ dollars for revenue every hour when x workers are employed. Find the marginal productivity when 5 workers are employed."

Page 115, Example 11. To require the chain rule, this should be worded as: "A dog 2 feet high trots proudly away from a 10-foot-high light post. When he is 8 feet from the post's base, he is moving at 3 feet per second. How fast is the tip of his shadow moving?" (In other words, the speed is not necessarily constant.)

Page 135, Exercise 46. "rise" should be "rises".

Page 136, Exercise 106, Line 2. The word "after" should be inserted:
"...in beats per minute of an athlete **after** climbing a vertical rope ...".

Chapter 3

Page 145, Exercise 50. Hint: Use the fact that the tangent line is horizontal at the lowest point on the graph.

Page 146, Line 10. The x at the end of the line should be x_0:
"...if there is an interval (a, b) containing $x_\mathbf{0}$ ..."

Page 148, Example 4. In the Solution, part (b) should read:
"$g'(2) = 3/2\sqrt{\mathbf{3}} > 0$" (not "$g'(2) = 3/2\sqrt{2} > 0$").

Page 198, Exercise 82. Delete part (a).
    In part (b), replace "after" by "during the first".

Page 198, Exercise 88. The reference should be to Fig. 1.R.**3** (not Fig. 1.R.2).

Page 199, Exercise 93, Lines 2 and 3. Insert "strict" before "local".

Chapter 4

Page 213. In the last paragraph: "The advantage of the method used here is that it can **be** applied to more general graphs."

Page 216. In the text above Figure 4.3.4, the sum should be $\sum_{i=1}^{n}$ (not $\sum_{i=1}^{\infty}$).

Page 227. In Figure 4.4.2, each t should be replaced by an x.

Page 231, Example 11. The second sentence should read:
    "If it starts out at $x = -1$ at time $t=$ **0**, where is it at time $t = 3$?"

Page 236. In the Fundamental Theorem of Calculus: Alternative Version, the interval should be "$[a, x]$" (not "$[a, b]$").

Page 239, Exercises for Section 4.5, #54. Assume that $F' = f$ is continuous. (This comment comes from having read Michael Spivak's *Calculus*.)

Chapter 5

Page 262, Exercises for Section 5.1, #15. The question mark should be a period.

Page 270, Example 9. In the Solution, part (b) should read:
    "As **in** Example 7..."

Page 286, Example 6. The text should read "$\cos^{-1}(-\frac{1}{2})$" (not "$\cos^{-1}(\frac{1}{2})$").

Page 294, Exercise 8, Line 4. Delete the extra "the".

Page 297, Example 2. In the solution just above Figure 5.6.4, the text should read: "from 1 to -1" (not "from 1 to 0").

Page 306, Review Exercises for Chapter 5, #79. In part (a), $\pi - 10^{-20}$ is intended (not $\pi + 10^{-20}$).

Chapter 6

Page 311, Exercises for Section 6.1. Exercises #14 and #15 are printed in reverse order.

Page 327. At the bottom of the page, "Exercixes" should be "Exercises".

Page 328. In the box at the top of the page, in #3, $\ln|x|$ should appear instead of $\ln x$. Alternatively the limit could be made one-sided: $x \to 0^+$.

Page 329. The footnote at the bottom of the page should refer to Review Exercise 129 (not Review Exercise 128).

Page 335, Exercise 89. In part (b), delete the extra "ln".

Appendix

Page A.1, Quiz A (3). "and" should be ","

Page A.13, 2.1 (49). The answer should be: 10 dollars/worker.

Page A.17, 3.2 (5). "positive to negative" should be "negative to positive."

Page A.19, 3.4 (13). The labels on the graph are wrong: the local minimum is at $x = \frac{3}{4}$ and the x-intercept is at $x = 1$.

Page A.22, 3.5 (15). The critical points are 0, 1/2, and $-1/2$.

Page A.22, 3.5 (27). The critical points are at -1 and 1. The minimum is $(1 - 1/2)$. (The other values are correct.)

Page A.27, 4.3 (27a). The dot at $x = 4$ should be solid.

Page A.27, 4.4 (21). The answer should be 319/24 (not 367/24.)

Page A.28, 4.4 (43). The answer should be: -29/3 units, 16 units.

Page A.29, 4.R (15). The correct answer is -5/4.

Page A.33, 5.3 (7). "$-a/c$" should be "a/c".

Page A.34, 5.4 (51). There should be two intervals in part (a), $[-2, -\sqrt{2}]$ and $[\sqrt{2}, 2]$, as in the graph for part (b).