235 Taalman/Kohn Errata List

This is the list of currently known typos and errors in the 235 Taalman/Kohn draft manuscript. It may seem like a lot, but most of them are picky or tiny errors.

We recommend that you take a few minutes to write in fixes for all of the typos and errors in your copy of the draft manuscript so that you don't get confused when you encounter them. Alternately, keep this list handy for reference when you are reading the section or doing homework problems.

If you find an error that is not in this list, please notify your instructor. If you are the first person to find it, you will earn one bonus point.

General/Overall

- ▷ Broken references such as "Section xxx" or "Section ??" appear here and there throughout the manuscript. Sorry, no bonus points will be given for finding broken references.
- ▷ The draft manuscript is in black and white but the original files are in color. There may be places where a color is referenced but (obviously) won't be visible to you. Hopefully not too many places, and hopefully things will be clear from the context.

Chapter 0: Basics

0.1: Logic and Proofs

- ▷ Page 5: Change the second part of the sentence in the statement of Definition 0.2 to the following new sentence: Such an implication is true if whenever statement A is true, we can also guarantee that statement B is true.
- ▷ Problem 1e: Answer should be "true."
- ▷ Problem 19: Closing parentheses missing in the answer.
- ▷ Problem 39: Answer should say that $x = -1$ is an example, since for all y we have $|y| > -1$.
- ▷ Problem 61: Answer should say that 0.5 is a counterexample to the original statement and its contrapositive, while the converse happens to be true.
- ▷ Problem 79: The answer to the first proof is missing. Here is the proof: We are given that C is true. By the first implication this means that B is false. By the contrapositive of the second implication this means that A must be true.

0.2: Functions and Graphs

- ▷ Page 20: Part (a) of Example 1 and its solution mention "square roots." Replace this with "the numbers that square to it," since by definition the square root of a number is the unique positive number that squares to it.

- ▷ Page 21: Part (a) of Example 2 should say $f(2)$, not $f(-2)$.
- ▷ Pages 22-23: In the solution to Example 5, the caption to the first graph should say $y \in [-10, 10]$, and the caption to the third should say $y \in [-1000, 1000]$. The caption to the graph on page 23 should say $y \in [-40, 40]$. No, I have no idea how that got so messed up.
- ▷ Problem 13: This is a repeat of the second Question from the reading. Do this one instead: If the graph of a rule $y = f(x)$ passes through $(-2, 1)$ and $(2, 1)$, could that rule be a function? Why or why not? (The answer is the same as what is in the back of the book right now.)
- ▷ Problem 15: The answers to (b) and (c) are reversed.
- ▷ Problem 17: The answer should be $(-\infty, 0] \cup [2, \infty)$.
- ▷ Problem 47: The answer to (c) is missing. It is $(3a + b, a, b)$.
- ▷ Problem 49: The problem should also ask you to find $f(1)$.
- ▷ Problem 57: Saying that the function is decreasing on $(-\infty, 1)$ and increasing on $(1, \infty)$ would also be acceptable.
- ▷ Problem 59: Part (b) in the answer isn't labeled with a "(b)." Also the values $f(-1) = -4.75$, $f(2) = 2$, $f(1) = 3.25$ at the extrema are not listed.
- ▷ Problems 88 and 89: The answer to Problem 88 should not have been given since that is an even problem. The answer to the odd Problem 89 is missing and it is as follows: The range of $f(x)$ is the set of real numbers y such that there is some x with $3x - 1 = y$. This range is $\mathbb{R}$, since for any real number y, the number $x = \frac{y+1}{3}$ has the property that $f(x) = 3(\frac{y+1}{3}) - 1 = y$.

0.3: Operations, Transformations, and Inverses

- ▷ Page 31: In the first paragraph, "is what gets applied" should instead say "that gets applied."
- ▷ Page 31: In the second figure, the red arrow should be labeled with "+5," and the blue arrow should be labeled with "−5."
- ▷ Page 31: In the fourth figure, the red arrows should be labeled with "×2" and the blue arrows should be labeled with "÷2."
- ▷ Page 33: In Definition 0.18, replace "Then" with "then."
- ▷ Page 33: In the last sentence on the page, "proof of follows directly" should say "proof follows directly."
- ▷ Problem 1: "True or False" should only be written one time in each of parts (f), (g), and (h).
- ▷ Problem 5: The problem should say that for the first two parts, there may be more than one possible answer. The answers to those parts should say: (a) one answer is $(1, 2)$; (b) one answer is $f(\frac{1}{2}x)$.

- ▷ Problem 7: The problem should say that the domain of f is $[2, \infty)$, or else there *is* enough information in part (b). The answers to parts (a) and (b) should have all occurrences of -2 replaced by 2.
- ▷ Problem 17: The domain in the answer should be $(-\infty, 3]$.
- ▷ Problems 19 and 20: The answer should refer to columns, not rows. Also Problem 20 is even and shouldn't have an answer in the first place.
- ▷ Problem 27: Last part of answer should say $g(1-5) = -\frac{1}{6}$.
- ▷ Problem 84: Answer should not be in the back since this is an even problem.
- ▷ Problems 85–93: Evens have answers and odds don't. Imagine an alternate universe where even is odd and odd is even.

0.4: Algebraic Functions

- ▷ Page 44: On last line of page, replace "For example, k is a positive integer" with "For example, if k is a positive integer."
- ▷ Page 46: Captions for the three graphs at the bottom of the page should have $(x-1)$ in their denominators instead of $(x+1)$.
- ▷ Page 47: Part (a) of Theorem 0.25 should refer to $q(x)$, not $g(x)$.
- ▷ Problem 23: Last sentence should begin with "This," not "his."
- ▷ Problem 24: Second part of function should be for $x > 2$.
- ▷ Problem 37: The equation for the given line should be $y = 2x + 1$.
- ▷ Problem 39: Answer should be $f(x) = 2x^2$.
- ▷ Problems 49 and 53: Don't worry about the "slant asymptote" part.
- ▷ Problem 59: Answer should be $f(x) = (x-2)^2 + 2$.
- ▷ Problem 81: The answer to part (b) is missing. It should say: If $f(x) = mx + b$ is a linear function with $m \neq 0$, then $f(x)$ is a polynomial of degree 1 with coefficients $a_1 = m$ and $a_0 = b$. If $f(x) = mx + b$ with $m = 0$ then $f(x)$ is a polynomial of degree zero with sole coefficient $a_0 = b$.

0.5: Transcendental Functions

- ▷ Page 56: In second paragraph, replace "we know it means" with "we know what it means."
- ▷ Page 56: Definition 0.30 should really be a theorem, stating that every exponential function *can* be written in the given form.
- ▷ Page 61: Example 1(b) should have $-\frac{\sqrt{3}}{2}$ as the final answer.
- ▷ Page 62: Example 2(b) final solution set should read $\{\ldots, -\frac{3\pi}{4}, \frac{\pi}{4}, \frac{5\pi}{4}, \frac{9\pi}{4}, \ldots\}$.

- ▷ Page 64: In the fourth item in the Questions, replace $\tan x$ with $\cot x$.
- ▷ Problem 20: At the end of the sentence, change $\sqrt{3}$ to $-\sqrt{3}$.
- ▷ Problem 21: Add this to the end of the answer in the back: "Their ranges are the restricted domains of $\sin x$, $\tan x$, and $\sec x$, respectively."
- ▷ Problem 25: Answer to part (b) should be "positive."
- ▷ Problem 53: Answer should say "negative."
- ▷ Problem 75: Answer to part (a) should end with $250e^{-0.0239t}$, and answer to part (b) should be 2.39%.
- ▷ Problem 88: The base conversion formula is stated incorrectly; it should say $\log_b x = \frac{\log_a x}{\log_a b}$.

Chapter 1: Functions

1.1: An Intuitive Introduction to Limits

- ▷ Problem 15: The interval should say $[0, 2]$.
- ▷ Problem 27: The limits listed should be $\lim_{x\to 3^-} f(x) = 2$ and $\lim_{x\to 3^+} f(x) = 2$.

1.2: Formal Definition of Limit

- ▷ Page 85: In the first paragraph, replace "sufficiently small punctured δ–interval $(c - \delta, c) \cup (c, c + \delta)$" to "sufficiently small interval $(c - \delta, c)$ to the left of $x = c$."
- ▷ Page 86: In part (a) of Definition 1.9, replace "$x \in (c - \delta) \cup (c, c + \delta)$" with "$x \in (c - \delta, c) \cup (c, c + \delta) x \in (c - \delta, c) \cup (c, c + \delta)$."
- ▷ Page 87: At the very end of the solution to Example 1(a), replace $(3, 4)$ with $(3, 5)$.
- ▷ Page 88: The part of the solution after the graphs at the top of the page should be labeled "(b)," not "(a)."
- ▷ Problem 24: Limit should be as $x \to 1^-$.
- ▷ Problem 36: Replace $3x - 1$ with $1 - 3x$ to make the statement true.
- ▷ Problem 53: Answer should be 0.016662.
- ▷ Problem 59: Answer should be $N = 5$.
- ▷ Problems 65 and 66: Should ask to find smallest $N > 0$.
- ▷ Problem 71: Replace $7 - x$ with $(7 - x)$. Also, last part of answer in the back should be labeled "(e)," not "(d)."
- ▷ Problem 73: Answer to part (c) should end with "$0 < \frac{1}{x} < \epsilon$," and end of part (e) should end with "$\frac{1}{x} \in (0 - \epsilon, 0 + \epsilon)$."

1.3 Delta–Epsilon Proofs

- ▷ Page 94: Replace "graph of $f(x) = 3x + 1$" with "graph of $f(x) = 3x - 1$."
- ▷ Page 95: The centered equation in the answer to Example 1(b) should begin with $|(x^2 - 4x + 5) - 1|$.
- ▷ Page 97: In the sentence after the proof at the top of the page, replace "wee" with "have."
- ▷ Page 98: The last centered calculation in the proof should begin with $|5x^4 - 80| \overset{\star}{<} 5\delta \cdot 65$.
- ▷ Problem 1(c): Should end with "$c - \delta < x < c + \delta$."
- ▷ Problem 1(f): Replace "$f(x) < |L + \epsilon|$" with "$0 < f(x) < |L + \epsilon|$" so that the answer will remain false.
- ▷ Problem 1(e): Replace "If $\lim_{x\to 3}(2x - 1) = 5$ then" with "$\lim_{x\to 3}(2x - 1) = 5$ means that".
- ▷ Problem 15: In the answer, replace the occurrence of "$x = 0.5$" with "$x = 0.74$."
- ▷ Problem 37: Change the problem to $\lim_{x\to 2} \frac{1}{x} = \frac{1}{2}$.
- ▷ Problem 45: Change the answer in the back to the following, so that the parts match the parts in the problem: With $C(r) = 0.25(2\pi r(5)) + 0.5(2\pi r^2) + 0.1(2(2\pi r) + 5)$, we have (a) $r \approx 1.94$ inches; (b) $|C(r) - 30| < 10$; (c) $r \in (1.43, 2.38)$, so $|r - 1.94| < 0.44$.
- ▷ The limit in the problem should be $\lim_{x\to 1}(2x^2 - 4x + 3) = 1$.

1.4: Continuity and its Consequences

- ▷ Page 104: Bottom right picture should have $f(c) + \epsilon$, $f(c)$, and $f(c) - \epsilon$ marked on the y-axis.
- ▷ Page 109: End of solution to Example 6(b) should be $[-2, -1) \cup (1, 2]$.
- ▷ Page 110: The answers for $f(x)$ and $g(x)$ are switched in the captions to the two graphs.
- ▷ Problem 8: Second case of the piecewise function should be for $x > 1$.
- ▷ Problems 18 and 19: The answer given for Problem 19 is really the answer for Problem 18.
- ▷ Problem 39: Second case of the piecewise function should be for $x \geq 3$.
- ▷ Problem 43: Answer should say right continuous at $x = 2$, not left continuous at $x = 2$.
- ▷ Problem 53: Answer to part (b) should say: The minimum value on that interval occurs at $x = \frac{4}{3}$, and the maximum value occurs twice, at $x = 0$ and $x = 2$.
- ▷ Problem 59: Answer should say $f(2) = -6$, not $f(2) = -22$.

▷ Problem 83: The given inequality should be $||a| - |b|| \leq |a - b|$.

▷ Problem 85: In the answer the choice for δ should say $\delta = \min(1, \frac{\epsilon}{2c+1})$.

▷ Problem 87: In the answer the choice for δ should say $\delta = \min(1, \epsilon \cdot \frac{(c-1)^2 c^2}{2c+1})$.

▷ Problem 89: In the answer the choice for δ should say $\delta = \min(1, \epsilon \cdot \frac{\sqrt{c-1}+\sqrt{c}}{2c+1})$. Also $c - 1 < c < c + 1$ should instead say $c - 1 < x < c + 1$.

1.5: Rules for Calculating Basic Limits

▷ Page 115: The end of the statement of the quotient rule for limits should say "if $\lim_{x \to c} g(x) \neq 0$."

▷ Page 116: In the proof of Theorem 1.20(b), add this after the first sentence: "We will assume here that both L and M are positive; the other cases are similar."

▷ Page 118: The centered equation in the proof of the Squeeze Theorem should say $L - \epsilon < l(x) \leq f(x) \leq u(x) < L + \epsilon$.

▷ Page 120: Just before the aligned expressions in part (c), replace "$\lim x \to 0 \sin x = 0$" with "$\lim_{x \to 0} \sin x = 0$."

▷ Problem 51: Answer should be $\frac{\pi}{6}$.

▷ Problem 61: Answer should be -1.

▷ Problems 79-80: The piecewise function described before the problems should have $m > 288,350$ in the last case, and the ".5" appearing in the second and third parts of the function should be omitted.

▷ Problem 86: The given function should be $f(x) = Ae^{kx}$.

1.6: Calculating Limits

▷ Page 129: In the proof of Theorem 1.27, the first centered line should have N_1 rather than N, and the second centered line should have N_2 rather than N.

▷ Page 130: Bottom left limit has an extra "$\lim_{x \to 1} \frac{x-1}{x-1}$."

▷ Page 131: In the last sentence before Special Exponential and Trigonometric Limits, replace "You will some" with "You will see some".

▷ Problem 17: In all three parts of the answer, the limit should be as $x \to \infty$.

▷ Problem 21: Answer to part (c) is not of the form ∞^0. Replace with $\lim_{x \to \infty} x^{\frac{1}{\ln x}}$.

▷ Problem 94: At end of problem statement, symbol "¿" should instead be a period.

Chapter 2: Derivatives

2.1: An Intuitive Introduction to Derivatives

- ▷ Page 146: Near the end of the solution to Example 2, replace "finally zero again after 0" with "finally zero again after g."
- ▷ Page 147: In the last sentence of the solution to Example 3, replace "we the slope of the tangent line might instead be something like 0.97 or 1.02, and we don't have enough information to say otherwise" with "the slope of the tangent line might instead be something like 0.97 or 1.02, but we don't have enough information to say otherwise".
- ▷ Problems 11–13: Graph of $g(x)$ on the right should say that it is for Problems 12 and 14.
- ▷ Problem 45: Change the second h value in the question to 0.25. Also, the answers should be negative.
- ▷ Problem 46: Change the second h value in the question to 0.25.
- ▷ Problem 47: Answer for $[2, 2.01]$ should be -64.16 rather than -64.6.
- ▷ Problem 48: Change the second h value in the question to 0.25.

2.2: Definition of Derivative

- ▷ Page 162: In the third item in the Questions, replace "s a function" with "Is a function".
- ▷ Problem 5: Answer is missing. It should say the following: Let $z = x + h$. Then $h \to 0$ is equivalent to $z \to x$, and $z - x = h$.
- ▷ Problem 33: Answer should be $\lim_{h\to 0} \frac{\sin h - 0}{h} = 1$; $\lim_{z\to 0} \frac{\sin z - 0}{z - 0} = 1$
- ▷ Problem 53: Answer is missing. It should be: $3x^2$, $6x$, and 6.
- ▷ Problem 55: Answer is missing. It should be: $6x$ and 12.
- ▷ Problem 63: Add to beginning of the answer: Continuous everywhere except at $x = 2$, and neither left nor right continuous at that point.
- ▷ Problem 65: Add to beginning of the answer: Continuous everywhere except at $x = -1$, where it is only left continuous.
- ▷ Problem 73: Answer should instead be: $f'_-(1) = \lim_{h\to 0^-} \frac{(1+h)^2 - (1)^2}{h} = 2$; $f'_+(1) = \lim_{h\to 0^+} \frac{(2(1+h)-1) - (1)^2}{h} = 2$; $f'(1) = -2$.
- ▷ Problems 90–94: Evens are underlined and odds aren't. Add this problem before Problem 90 to change the parity: Use the definition of derivative to prove that every quadratic function $f(x) = ax^2 + bx + c$ has the property that its graph has a horizontal tangent line at the point $x = -\frac{b}{2a}$.

- ▷ Problem 90 (now 91 after adding problem above): Answer is $\lim_{h\to 0} \frac{(m(x+h)+b)-(mx+b)}{h} = \lim_{h\to 0} \frac{mh}{h} = \lim_{h\to 0} m = m$.
- ▷ Problem 92 (now 93 after adding problem above): Answer also missing: The tangent line to $f(x)$ at $x = c$ has slope $f'(c)$ and passes through the point $(c, f(c))$. Putting this slope and point into the point-slope form of a line gives the desired answer.

2.3: Rules for Calculating Basic Derivatives

- ▷ Page 168: Part (c) of Theorem 2.7 should say $\frac{d}{dx}(mx + b) = m$, of course!
- ▷ Page 171: At the start of the second paragraph of the subsection, replace "In general, the derivative of a product is not in general the product." with "In general, the derivative of a product is not necessarily the product".
- ▷ Problem 61: This is a repeat of Problem 55. Replace with the given function with $f(x) = \frac{1}{(x-2)(x-3)}$. The answer should then be as follows: It is easier to differentiate after simplifying to $f(x) = \frac{1}{x^2-5x+6}$. We have $f'(x) = \frac{0(x^2-5x+6)-(1)(2x-5)}{(x^2-5x+6)^2} = \frac{-2x+5}{(x^2-5x+6)^2}$.
- ▷ Problem 77: The constant term of the answer should be 2, not $\frac{71}{10}$.
- ▷ Page 180: In the first note in the Thinking Forward section, there is a stray parenthesis at the end.

2.4: The Chain Rule and Implicit Differentiation

- ▷ Page 186: Solution to Example (a) should have +2 at the end in the second and third steps of the calculation.
- ▷ Problem 1(h): Replace $x = 2$ at the end of the problem with $(2, 0)$. The answer is then "False."
- ▷ Problem 5: Answer to (a) should say $f'(u(v(w(x))))u'(v(w(x)))v'(w(x))w'(x)$.
- ▷ Problem 22: The equations in the problem should be $xy^2 + x = 1$ and $1 + x + xy^2 = 0$.
- ▷ Problem 73: Remove parenthetical remark at the end of the problem. Answer was missing, and should say: "Mimic the proof in Example 4(a)."

2.5: Derivatives of Transcendental Functions

- ▷ Page 197: Example 3(a) should involve arcsine, not arccosine. Change function to $f(x) = x \sin^{-1}(3x+1)$ and answer to $f'(x) = (1) \cdot \sin^{-1}(3x + 1) + x \cdot \frac{1}{\sqrt{1-(3x+1)^2}}(3) = \sin^{-1}(3x + 1) + \frac{3x}{\sqrt{1-(3x+1)^2}}$.
- ▷ Page 199: In the second-to-last step of the centered calculation in Example 5, the note should say that we are solving for y', not y.
- ▷ Problem 21: The answer for the derivative of the second case of the function should be $-\frac{2}{x^3}$.

- ▷ Problem 23: Answer should be $f'(x) = \begin{cases} 2x, & \text{if } x < 1 \\ \text{DNE}, & \text{if } x = 1 \\ \frac{1}{x}, & \text{if } x \geq 1. \end{cases}$
- ▷ Problem 53: Missing opening parenthesis at the start of the answer.
- ▷ Problems 82–89: Even/odd mixup. Remove problem 82 and all will be fixed. For the next few notes I will refer to the old, unchanged numbering.
- ▷ Problem 86: Add to the end of the first sentence of part (a): "For some constant a."
- ▷ Problem 88: Answer in the back was missing; should be $\frac{d}{dx}(e^{kx}) = e^{kx} \cdot \frac{d}{dx}(kx) = e^{kx} \cdot k = ke^{kx}$.

Chapter 3: Applications of the Derivative

3.1: The Mean Value Theorem

- ▷ Page 213: In the last block of problems it says Exercises 23–26, but should say Exercises 13–22.
- ▷ Problem 23: In the answer, the first critical point should be at $x = \frac{3}{2}$, not $x = \frac{1}{2}$.
- ▷ Problem 32: Oops. There is no problem 32. This causes and even/odd problem for the rest of the section. Please pretend that this did not happen.
- ▷ Problem 40: A parenthesis is missing in the answer. The first value of c should be $c = \frac{1}{3}(4 - \sqrt{7})$.
- ▷ Problem 46: The interval in the problem should be $[a, b] = [0, 2]$, since $f(1)$ is not equal to zero. In related news, the answer should say $f(2) = 0$, not $f(1) = 0$.
- ▷ Problem 62: The answer to part (b) is not in the back. Move the parenthetical remarks in the question to the answer in the back.

3.2: The First Derivative and Function Behavior

- ▷ Problem 11: Answer should have $a^4 > b^4$ instead of $a^2 > b^2$ and $a^4 < b^4$ instead of $a^2 < b^2$.
- ▷ Problems 71 and 72: The answer given to Problem 71 is really the answer to Problem 72. Consider the number lines switched so that things match up.

3.3: The Second Derivative and Function Behavior

- ▷ Problem 1(c): The word "If" is written twice.
- ▷ Problem 67: In part (b) change "south" to "north." In part (d) correct spelling of "direcction" to "direction."

3.4: Optimization

- ▷ Problem 37: Add this sentence to the end of the answer: "The resulting pen will have an area of $31,250$ square feet."
- ▷ Problem 29: Change answer to: "The base of the box should have sides of length 6.26 inches, and the height of the box should be 15.66 inches. The resulting largest possible volume is approximately 613.68 cubic inches."
- ▷ Problem 49: Problem references "three shapes" but it should say "two shapes."

3.5: Related Rates

- ▷ Page 255: The second centered equation in the solution to part (b) of Example 1 should end with $(8\pi + 4\pi r)\frac{dr}{dt}$.
- ▷ Page 255: The first centered equation in the solution to part (a) of Example 1 should end with 7^2.
- ▷ Problem 1: Answer should be F, T, T, F, T, T, T, F.
- ▷ Problem 7: The answer should also mention that one proper statement of the Pythagorean Theorem is given in Theorem 3.13(a).
- ▷ Problem 39: Answer should be $\frac{dV}{dt}\Big|_{s=8} = 6(8)^2 = 384$ cubic inches per minute.
- ▷ Problem 41: Answer should be $\frac{dV}{dt}\Big|_{x=\sqrt[3]{55}} = 6(\sqrt[3]{55})^2 \approx 86.77$ cubic inches per minute.

3.6: Exponential Growth and Decay

- ▷ Problem 27: Answer should be 31.37%.
- ▷ Problems 40–46: Block of application problems at the bottom of the page should reference problems 40–46 rather than 40–45.
- ▷ Problems 51–54: Note at start of block should reference 51–54, not 55–60.

3.7: L'Hôpital's Rule

- ▷ Problem 75: Answer should be ∞.

Chapter 4: Definite Integrals

4.1: Addition and Accumulation

- ▷ Page 286: In the proof of part (a) of Theorem 4.2, replace the two expanded sums with $ca_1 + ca_2 + ca_3 + \cdots + ca_{n-1} + ca_n$ and $c(a_1 + a_2 + a_3 + \cdots + a_{n-1} + a_n)$.
- ▷ Problems 1(b) and 1(c): The final sum in each of these problems should be $\sum_{k=0}^{n} \frac{k^3+k^2+1}{k+1}$.

▷ Problem 33: The $k = 2$ term was left out of the answer. That term is approximately equal to 0.17889, and including it changes the value of the sum to approximately 1.8558.

▷ Problem 49: Answer should be $\lim_{n\to\infty} \dfrac{n + n(n+1) + \frac{1}{6}n(n+1)(2n+1)}{n^3 - 1} = \frac{1}{3}$.

4.2: Approximating Area with Riemann Sums

▷ Problem 39: Change answer to $\displaystyle\sum_{k=1}^{20} \sqrt{1 - \left(-1 + \tfrac{2k-1}{20}\right)^2}\,\left(\tfrac{1}{10}\right)$.

▷ Problems 40–44: The block of problems should reference 40–44, not 40–43.

▷ Problem 45: Answer to part (a) should be 1320 feet.

4.3: The Definite Integral

▷ Page 309: In the paragraph under Definition 4.8, replace "It may help you remember Definition 12.6" with "It may help you remember this definition."

▷ Page 316: Fix double comma in note before problems 21–32.

▷ Problem 35: Answer is missing a parenthesis, should start with $\displaystyle\sum_{k=1}^{n} 2(\tfrac{k}{n})^2(\tfrac{1}{n})$.

▷ Problem 37: In the answer, replace the N with n.

▷ Problem 49: Add "$= -\int_a^b f(x)\,dx$" to the end of the answer.

4.4: Areas and Average Values

▷ Nothing here yet; what can you find?

Chapter 5: The Fundamental Theorem of Calculus

5.1: Indefinite Integrals

▷ Problem 25: Answer should be $\frac{1}{3}x^3 + \frac{1}{\ln 2}(2^x) + 4x + C$.

5.2: The Fundamental Theorem of Calculus

▷ Problem 51: Answer to part (b) should be $-\frac{1}{4} - 4\ln(\frac{3}{2}) + 2\ln(4)$.

▷ Problems 69 and 70: Answer to problem 70 is actually the answer to problem 69.

5.3: Functions Defined by Integrals

▷ Problem 7: In the answer, replace "(b" with "(b)".

▷ Problem 67: In part (b) of the problem statement, a word is missing. Replace "Why does the Mean Value Theorem to $F(x)$ on $[a, b]$" with "Why does the Mean Value Theorem apply to $F(x)$ on $[a, b]$."