

ERRATA TO “ADVANCED CALCULUS”
(3rd and later printings)

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“line $-n$ ” means “line n from the bottom.”

Page 15, line 12: $cx^3 \rightarrow cx^4$

Page 21, line -13 : $\mathbf{l} \rightarrow \mathbf{L}$

Page 21, line -12 : $\mathbf{x}_k \rightarrow x_k$

Page 22, Theorem 1.15b: $\{\mathbf{x}_k\}$ *sequence* \rightarrow *sequence* $\{\mathbf{x}_k\}$

Page 26, line 6: $(x_{k-1} - ax_{k-1}^{-1})^2 \rightarrow \frac{1}{4}(x_{k-1} - ax_{k-1}^{-1})^2$

Page 29, Exercise 7, line 1: $\mathbf{a} \rightarrow \mathbf{x}$

Page 31, proof of Corollary 1.23, line 3: $V \rightarrow S$

Page 45, line 2: Add $f'(a)g'(a)h^2$ to the expression on the right.

Page 61, Example 4, line 2: *direction* \rightarrow *in the direction*

Page 68, Figure 2.3: There should be a line joining y to s .

Page 68, line -9 : in $S \rightarrow S$

Page 73, line -1 : *so there* \rightarrow *so*

Page 74, line 6: *going to going to* \rightarrow *going to*

Page 74, Example 1b, line 1: *as as* \rightarrow *as*

Page 128, line 15: $\mathbb{R}^2 \rightarrow \mathbb{R}^3$

Page 103, line 3: *may derived* \rightarrow *may be derived*

Page 109, proof of Theorem 2.86: The subscript k should be replaced by another letter (since k is already the dimension of the domain of \mathbf{g}).

Page 126, line -10 : *parametrically* \rightarrow *parametrically by*

Page 127: The comma at the end of (3.13) should be a period.

Page 150, line before Theorem 4.6: *are easy* \rightarrow *easy*

Page 166, line 12: $d^n \delta \mathbf{x} \rightarrow d^n \mathbf{x}$

Page 183, Theorem 4.41: Assume that $\overline{T} \subset U$ (as in Theorem B.24, in order to avoid the possibility that the integral on the right of (4.42) might be improper because $\det D\mathbf{G}$ need not be bounded on U).

Page 189, line -12 : $\partial_{y_j} \rightarrow \partial_{x_j}$ (two places)

Page 189, Theorem 4.47: Replace the hypothesis “If $f \dots$ for each $\mathbf{y} \in S$ ” by “If f and $\nabla_{\mathbf{x}} f$ are continuous on $T \times S$ ”.

Page 203, line before (4.64): to define \rightarrow to define

Page 209, line 10: the set \rightarrow the Lebesgue measurable set

Page 223, line after (5.16): $[a, b] \rightarrow [c, d]$

Page 226, line 7 of Example 2: $-6\pi \rightarrow -3\pi$

Page 226, 2nd line after Example 3: as at \rightarrow as a

Page 227, 4th line before the exercises: (29) \rightarrow (5.18)

Page 230, line 5: $\mathbf{G}(v) \rightarrow \mathbf{G}(u, v)$

Page 232, line 2: on \rightarrow in

Page 233, line -3: surface \rightarrow surface

Page 234, line 3: $\mathbf{n} \cdot dA \rightarrow \mathbf{n} dA$

Page 251, line 10: (5.30) \rightarrow (5.31)

Page 259, line 8: $F_j \rightarrow G_j$

Page 259, first display: $x + t \rightarrow x_1 + t$

Page 260, first display: $\int_{L(\mathbf{a}, \mathbf{x})}$ and $\int_{L(\mathbf{a}, \mathbf{x} + \mathbf{h})}$ should be switched.

Page 261, line -1: $2x + x^2y \rightarrow 2y + xy^2$

Page 263, bottom half: $+\partial_y \psi(x, y) \rightarrow -\partial_y \psi(x, y)$ (4 places)

Page 265, Proposition 5.65 and the following 2 lines: $\mathbf{F} \rightarrow \mathbf{H}$ (6 places)

Page 267, line -8: $\partial_1 G_{n-1} \rightarrow \partial_{n-1} G_1$

Page 269, from (5.67) to line -6: all A 's should be F 's.

Page 272, lines 7 and 13: $\mathbf{T}(u) \rightarrow \mathbf{T}(\mathbf{u})$

Page 272, line 8: $x \rightarrow \mathbf{x}$ and $dx_j \rightarrow dx_m$

Page 272, line 12: $C_{lm}(x) \rightarrow C_{lm}(\mathbf{x})$

Page 272, line -2: $C^{(1)} \rightarrow C^1$

Page 273, line 8 $\mathbb{R}^3 \rightarrow \mathbb{R}^n$

Page 273, line 13: $C^{(1)} \rightarrow C^1$

Page 277, line 9: Delete the factor of c .

Page 280, line 1: an \rightarrow to an

Page 289, line 13: $m \geq 0 \rightarrow m > 0$

Page 289, Theorem 6.14, line 1: Suppose \rightarrow Suppose

Page 292, line 5 of Example 7: $5n^3 + 9n^2 + 3 \rightarrow 5n^3 + 9n^2 + 3n$

Page 296, line -3: $\frac{1}{k} \rightarrow \frac{1}{k+1}$

Page 314, line -2: $1/2k \rightarrow 1/\sqrt{3}k$ and $16k/25 \rightarrow 9k/8\sqrt{3}$

Page 315, line 7: $k > 1/2\delta \rightarrow k > 1/\sqrt{3}\delta$

Page 315, line 10: $k > \frac{1}{2\delta} \rightarrow k > \frac{1}{\sqrt{3}\delta}$

Page 327, line 9: $f(k) \rightarrow f^{(k)}$

Page 330, line -7: $x^{x+1} \rightarrow x^{n+1}$

Page 352, line 6: 7.61 \rightarrow 7.60

Page 352, line 7: 7.62 \rightarrow 7.61

Page 363, sketech for Exercise 7: π is the midpoint of the interval where f is negative, not the right endpoint.

Page 368, last line of Exercise 1: 5 \rightarrow 7

Page 388, line 3: $\exp \rightarrow b_n \exp$

Page 398, Corollary 8.45: $L^2(\pi, \pi) \rightarrow L^2(-\pi, \pi)$

Page 405, line 4 of Section A.1: $c\mathbf{x}_1 \rightarrow c_1\mathbf{x}_1$

Page 429, line 6: B.9 \rightarrow B.13

Page 437, first line of last paragraph: region \rightarrow a region

Page 438: *piecewise smooth* $\rightarrow C^1$

Page 439, line 9: $w - \phi(u, v) \rightarrow w + \phi(u, v)$

Page 441, Section 1.2, 1c: $x \geq 1 \rightarrow x \geq 0$ and $y \geq 1 \rightarrow y \geq 0$

Page 442, Section 2.6, 3a, line 3: $3x \cos 3y \rightarrow 6x \cos 3y$

Page 445, Section 4.3, 5a: $\frac{33}{8} \rightarrow \frac{17}{8}$

Page 447, Section 5.4, 1(a): $y - y^2 \rightarrow y - 2xy$

Page 448, Section 5.8, Problem 2b: $xyz - \frac{1}{2}x^2 - \frac{1}{2}z^2 \rightarrow xyz + \frac{1}{2}x^2 + \frac{1}{2}z^2$