Errata for
A Course in Multivariable Calculus and Analysis

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In the following, "line $+i$" means the ith line from the top, whereas "line $-i$" means the ith line from the bottom. The text to be changed appears in red, while the corrected version appears in blue.

Page 5, Line +16: Change least upper bound to greatest lower bound

Page 10, Line −12: Change $f(x, y) \geq 0$ to $f(x, y) > 0$

Page 34, Line −6: Change handled them with to handled with

Page 37, Line +20 to +22: Change the entire Exercise 24 to Let D be a convex subset of $\mathbb{R}^2$ and let f be a convex function on D. If (x, y) and $(-x, -y)$ belong to D, then show that $(0, 0) \in D$ and $2f(0, 0) \leq f(x, y) + f(-x, -y)$.

Page 45, Line +2: Change If to Let $a_n \to a$. If

Page 85, Line −10 : Change D to D_1

Page 88, Line +5: Change $x_0 \in [c, d]$ to $x_0 \in [a, b]$

Page 97, Line +4 : Change $f_{i,j}$ to $g_{i,j}$

Page 97, Line −13: Change $u : D \to \mathbb{R}^2$ to $u : D \to \mathbb{R}$

Page 97, Line −8: Change f to g

Page 117, Line +7: Change differentiable to nonconstant differentiable

Page 117, Line +8: Change does not vanish to vanishes

Page 118, Line −10: Change $f(x, y)$ to $f(x_1, y_1)$

Page 118, Line −10: Change (at two places) $k\dfrac{\partial}{\partial x}$ to $k\dfrac{\partial}{\partial y}$

Page 122, Line −5 : Change $\begin{bmatrix} \frac{\partial x}{\partial t} \\ \\ \frac{\partial y}{\partial t} \end{bmatrix}$ to $\begin{bmatrix} \frac{dx}{dt} \\ \\ \frac{dy}{dt} \end{bmatrix}$

Page 123, Line −3: Change (at two places) $\frac{dF}{dz}$ to $\frac{dg}{dz}$

Page 124, Lines +10, +11, −14, −13: Change $\frac{\partial F}{\partial x}$ to $\frac{\partial f}{\partial x}$

Page 124, Lines +10, +11, −14, −13: Change $\frac{\partial F}{\partial y}$ to $\frac{\partial f}{\partial y}$

Page 154, Line +9: Change $\sqrt{h^2 + k^2}$ to $|h| + |k|$

Page 155, Line +10: Change 18 (ii) to 18 (ii) of Chapter 2

Page 155, Line +10: Change 19 to 19 of Chapter 2

Page 156, Line −2: Change $(y - b)(z - c)$ to $(y - c)(z - p)$

Page 163, Line +15: Change vanishes to is equal to the zero vector

Page 163, Line +20: Change $\nabla f = \lambda \nabla g$ to $\nabla f(x, y) = \lambda \nabla g(x, y)$

Page 165, Line +10: Change $\nabla f = \lambda \nabla g$ to $\nabla f(x, y, z) = \lambda \nabla g(x, y, z)$

Page 165, Line −17: Change ∇g to $\nabla g(x, y, z)$

Page 166, Line +22: Change $\mu h(x, y, z)$ to $\mu \nabla h(x, y, z)$

Page 187, Line −10: Change $1/n, 1/k$ to $(b - a)/n, (d - c)/k$

Page 202, Line +2: Change P to P_ϵ

Page 202, Line −4: Change $f(x, y))$ to $f(x, y)$

Page 213, Line +11: Change R to $\mathbb{R}$

Page 213, Line −6: Change 5.19 to 5.23

Page 219, Line −6: Change $0 \leq a < b$ and $0 \leq c < d$ to $0 < a < b$ and $0 < c < d$

Page 220, Line −13: Change Moreover, by Proposition 5.28, we have to Moreover,

Page 222, Line −4: Change subintervals to subrectangles

Page 223, Line +1: Change subintervals to subrectangles

Page 223, Lines −13, −9: Change any to an arbitrary

Page 223, Line −8: Change double integrable to integrable

Page 224, Line +3: Change $[a, b) \times [c, d)$ to $[a, b] \times [c, d]$

Page 238, Line −19: Change iterated integral to integral

Page 245, Line +14: Change and $D_1 \cap D_2$ are to and $D_1 \cap D_2$ is

Page 268, Line +18: Change Exercise 43 to Exercise 43 of Chapter 3

Page 272, Line −10: Change $d(y, z)$ to $d(x, y)$

Page 272, Line −9: Change $f(x, y, z)$ to $\int_{\phi_1(x,y)}^{\phi_2(x,y)} f(x, y, z)dz$

Page 275, Line +16: Change f to $f \circ \Phi$

Page 278: Change Figure 5.26 with this Revised Figure

Page 282, Line −3: Replace $x \leq y$ to $y \leq x$

Page 285, Line +19: Replace $49/192$ to $49/576$

Page 302, Line −16: Change D, yz-plane to D by the yz-plane

Page 303, Line +11: Change $[-\pi, \pi] \times [f_1(x), f_2(x)]$ to $[f_1(x), f_2(x)] \times [-\pi, \pi]$

Page 349, Line −5: Change the the to the

Page 350, Line +10: Change of to under

Page 359, Line −6: Change tetrahedron D to tetrahedral region D in $\mathbb{R}^3$

Page 359, Line −4: Change polyhedron to polyhedral region

Page 416, Line −13: Change Proposition 5.19 to Proposition 5.20

From Page 422, Line −6 to Page 425, Line −11: Change the entire text from the statement of the Integral Test to the beginning of the next subsection with this Revised Text

Page 438, Line +10: Change if and only if to if and only if there is

Page 442, Lines +1, −1: Change subsets D_n to subset D_n

Page 456, Line +3: Change diverge to ∞. (Hint: Divergence of to converge if $p > 1$ and diverge to ∞ if $p \leq 1$. (Hint: Convergence as well as divergence of

Page 471, Line −6, Left column: Change area, 186, 241 to area, 186, 241, 441

Page 473, Line +12, Right column: Drop iterated series, 381

Page 475, Line +10, Left column: Change smooth to smooth curve

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Please notify the authors if you know of errata not on the above list. Please write to one or both of the following:

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