

## Errata for Vector Calculus, Fourth Edition

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This file contains the errata known to us as of the above date for the fourth printing of the 4th edition, (August, 1999). You can tell if you have the **fourth printing** of the fourth edition by looking at the bottom of the page opposite the table of contents page. It should say “Fourth printing, 1999”.

If you have an earlier printing please see the web site for the errata list:  
<http://www.cds.caltech.edu/~marsden>.

We are very grateful to readers who point out errors—we are making every effort to eliminate them! We are especially grateful to Mark Lynch, Chris Phillips, Robert Strichartz, and Tom Witelski for their comments.

### Covers

on the inside back leaves, in formula 61, replace “x” in the numerator on the left hand side with “1” and in formula 62, replace “1” in the numerator on the left hand side with “x”

### Chapter 1

Page 54, In the determinant in 18(b) the (1,1) entry should be  $\mathbf{u} \cdot \mathbf{u}$ .

Page 60, In the solution to Example 2(a), near the end of the line,  $\pi$  should be  $2\pi$  and  $3\pi/4$  should be  $7\pi/4$ .

Page 68, In the matrix with the shaded column in the middle of the page, the first column should be  $b_{11}, \dots, b_{n1}$ .

### Chapter 2

Page 144, In Exercise 27,  $\partial/\partial x$  should be  $d/dx$ .

### Chapter 5

Page 324, In the solution of Example 2, the first sentence should read “We shall simplify matters if we first interchange the order of integration.” As Chris Phillips points out, one can evaluate it in the given order using the substitution  $u = \sqrt{1 + e^{2y}}$ , although this is more complicated.

## Chapter 8

Page 517, in Exercise 22(a), in the display,  $\operatorname{div} \mathbf{F}(\mathbf{x})$  should be  $\operatorname{div} \mathbf{F}(\phi(\mathbf{x}, \mathbf{t}))$

## Answers

Page 596, The answer to review problem 21 for Chapter 5 should be  $7/12$ , not  $11/12$ .