

## Errata to Student Solution Manual to S. J. Colley, *Vector Calculus*, 2nd ed.

January 27, 2005

- p. 14, Exercise 39 (b). In view of the sign error in  $\mathbf{e}_\varphi$  in formulas (9) on page 75 of the text, several signs must be changed.
- p. 19, Exercise 7. Replace “Range  $\mathbf{f} = \{(x, y, z) \mid y \neq 0, z \geq 0\}$ ” with “Range  $\mathbf{f} = \{(x, y, z) \mid y \neq 0, y^2 z = (xy - y - 1)^2 + (y + 1)^2\}$ ”.
- p. 45, Exercise 27. In the first display, replace the equation for  $\mathbf{e}_\varphi$  with  $\mathbf{e}_\varphi = \cos \varphi \cos \theta \mathbf{i} + \cos \varphi \sin \theta \mathbf{j} - \sin \varphi \mathbf{k}$ . Also, in line 3 of the solution, replace “cylindrical” with “spherical”.
- p. 46, line 8. The final result should be  $\frac{\partial f}{\partial \rho} \mathbf{e}_\rho + \frac{1}{\rho} \frac{\partial f}{\partial \varphi} \mathbf{e}_\varphi + \frac{1}{\rho \sin \varphi} \frac{\partial f}{\partial \theta} \mathbf{e}_\theta$ .
- p. 74, line -6. Replace  $\int_0^1 4 dt = 4$  with  $\int_0^1 -4 dt = -4$ .
- p. 74, line -4. Replace  $\int_{-1}^1 2 dy = 4$  with  $\int_{-1}^1 -2 dy = -4$  at the end of the line.