List of Errata

Handbook of Exact Solutions for Ordinary Differential Equations, 2nd Edition, Chapman & Hall/CRC Press, 2003 by A. D. Polyanin and V. F. Zaitsev

Page 10: Paragraph 0.1.6-1, line 3:
Was: The Abel equation (1) is not integrable for arbitrary $f_n(x)$. ...
Correct: The Abel equation (1) is not integrable for arbitrary $f_n(x)$ and $g(x)$. ...

Page 36: Paragraph 0.3.2-8, line 5:
Was: ... a first-order equation for φ:
Correct: ... a first-order equation for y:

Page 39: Line 2:
Was: ... in the Taylor series expansion of a differential equation about ...
Correct: ... in the Taylor series expansion of a solution to a differential equation about ...

Page 81: Subsection 1.1.5, line 2:
Was: $w'_x = (1-n)f_1(x)w + (1-n)f_n(x)$.
Correct: $g(x)w'_x = (1-n)f_1(x)w + (1-n)f_n(x)$.

Page 204: Equation 16, last line:
Was: $\ldots = g(t)u + f(t)u^n$.
Correct: $\ldots = g(t)u - f(t)u^n$.

Page 219: Equation 62, solution in Item 2°:
Was:

$$y = \begin{cases} C_1 \dfrac{d^n}{dx^n} \cos\sqrt{4ax} + C_2 \dfrac{d^n}{dx^n} \sin\sqrt{4ax} & \text{if } ax > 0, \\ C_1 \dfrac{d^n}{dx^n} \cosh\sqrt{4|ax|} + C_2 \dfrac{d^n}{dx^n} \sinh\sqrt{4|ax|} & \text{if } ax < 0. \end{cases}$$

Correct:

$$y = \begin{cases} C_1 \dfrac{d^n}{dx^n} \cos\sqrt{4bx} + C_2 \dfrac{d^n}{dx^n} \sin\sqrt{4bx} & \text{if } bx > 0, \\ C_1 \dfrac{d^n}{dx^n} \cosh\sqrt{4|bx|} + C_2 \dfrac{d^n}{dx^n} \sinh\sqrt{4|bx|} & \text{if } bx < 0. \end{cases}$$

Page 236: Equation 179, line 4:
Was: $z(1-z)y_{zz} - (Ax+B)y'_z - Cy = 0, \ldots$
Correct: $z(1-z)y_{zz} - (Az+B)y'_z - Cy = 0, \ldots$

Page 434: Equation (6):
Was:

$$y_{zz} = \frac{(y'_z)^2}{y} - \frac{y'_z}{y} + \cdots \tag{6}$$

Correct:

$$y_{zz} = \frac{(y'_z)^2}{y} - \frac{y'_z}{z} + \cdots \tag{6}$$