

ERRATA

IN

Ordinary Differential Equations: An Introduction to the Fundamentals 2016 Edition (January 17, 2020)

Notes:

Text from the book is printed using this font (Times Roman)

Comments are printed using this font (Univers Condensed)

Text to be added is underlined and in italics *like this*

Text to be deleted has been "struck out" ~~like this~~

(And, of course, beware of possible typos in this list of typos.)

Chapter 2 (Integration, ...), page 30, 12th line from bottom: Now recall what ~~is~~ it means ...

Chapter 20 (Method of Undetermined Coefficients), page 389, third displayed equation from the bottom: Replace

$$y_p'' = 3Ae^{3x} + 3Axe^{3x} + \dots \quad \text{with} \quad y_p'' = 3Ae^{3x} + 3Ae^{3x} + \dots .$$

Chapter 23 (The Laplace Transform), page 447, right side of the last displayed equation : Replace

$$\dots = 0 + \frac{1}{s}e^{\alpha x} \quad \text{with} \quad \dots = 0 + \frac{1}{s}e^{-\alpha x} .$$

Chapter 25 (The Inverse Laplace Transform), page 486, right side of the displayed equation in Theorem 25.2:

Replace

$$= c_1\mathcal{L}^{-1}[F_1(s)] + c_2\mathcal{L}[F_2(s)] + \dots + c_n\mathcal{L}[F_n(s)]$$

with

$$= c_1\mathcal{L}^{-1}[F_1(s)] + c_2\mathcal{L}^{-1}[F_2(s)] + \dots + c_n\mathcal{L}^{-1}[F_n(s)] .$$

Chapter 27 (Piecewise-Defined Functions ...), page 515, line 7: (This is the function sketched in figure 27.1b on page ~~509~~ 510.)

Chapter 36 (Critical Points, Direction Fields, ...), page 775, system (36.1), second displayed equation: Replace

$$y' = f(t, x, y) \quad \text{with} \quad y' = g(t, x, y) \quad .$$

Chapter 36 (Critical Points, Direction Fields, ...), page 775, system (36.1), second displayed equation: Replace

$$y' = f(x, y) \quad \text{with} \quad y' = g(x, y) \quad .$$

Answers to Selected Exercises, page 818, Chapter 2, exercise 7c: Replace $\frac{\pi}{2}$ with $\frac{\pi}{4}$.

Answers to Selected Exercises, page 818, Chapter 2, exercise 7d: Replace π with $\sqrt{\pi}$..

Answers to Selected Exercises, page 818, Chapter 5, exercise 2j. The answer should be

$$y(x) = \left[\frac{2}{3}x^{3/2} + c \right] e^{-\sqrt{x}} \quad .$$