

**List of corrections**  
**Lectures on Differential Equations**  
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p. 86: For the problem IV.10 the correct answer is

$$y = \frac{4}{9}e^{2t} - \frac{1}{9}e^{-t}(3t - 5) .$$

P. 104, Case 3:  $y = c_1e^{ps} \cos qs + c_2e^{ps} \sin qs$ .

p. 144: For the problem III.6 it should be

$$y_1(x) = 1 + (x - 2)^2 + \frac{1}{6}(x - 2)^3 + \frac{1}{6}(x - 2)^4 + \frac{1}{15}(x - 2)^5 \dots .$$

p. 206: The direction of the motion on the stable spiral should be clockwise.

p. 211: For the problem II.6 the correct answer is *saddle*.

p. 237: A *limit cycle* is a periodic solution that attracts nearby solutions as  $t \rightarrow \infty$ , or  $t \rightarrow -\infty$ .

p. 241: The function  $h(x, y)$  in (6.5.7) need not be assumed positive.

p. 242, line 11:  $a(t)$  is the rate of growth (not carrying capacity).

p. 243, third line above Corollary 6.6.1: ... an increase in *the rate of growth* will increase...

p. 262: The number 6 on the graph should be 5.

p. 264, lines 3 and 4:  $dx$  is missing in the integrals.

p. 268 In Case 2:  $y(L) = c_1 + c_2L$ .

p. 313: For the problem II.8 the correct answer is

$$u(x, y) = 2 + \frac{1}{2}(x^2 - y^2) - y .$$

p. 339: The integral in the last line should be  $\int_{x_0-ct_0}^{x_0+ct_0} g(\tau) d\tau$ .

p. 374: the formula in (iii) should read:

$$\int_D u_x v dV = - \int_D u v_x dV + \int_S u v n_1 dS .$$

p. 390: We need to solve the system  $(B - 4I)x = 0 \dots$