List of identified misprints in the first edition of 'Mathematics of Economics and Business'

(to be updated, if necessary; date: 10 March 2017)

• page 20, line 4: Replace

 $b \in B'$ by $a \in B'$

- page 40, line 6 from below: Replace (-2a) by (-2ax)
- page 50, line 5 from below: It must be: $\tan \varphi = -\sqrt{3}$ (same as in line 13 from below)
- page 55, Figure 1.10: Replace ' z_1 i' by ' z_1 '
- page 70, formula in line 5: In the third case for p > q, replace ' ∞ ' by ' $\pm \infty$ '
- page 122, lines 1 and 3: Replace ' W_f ' by ' R_f '
- page 122, line 3 from below: Replace the sign '<' by '>'
- page 122, line 2 from below: Replace 'increasing' by 'decreasing'
- page 136, line 13: It must be f(-x) = f(x)
- page 141, lines 1 and 3: Replace '[1,1]' by '[-1,1]'
- page 162, lines 10 13: The domains refer to the functions f' (i.e., replace D_f by $D_{f'}$)
- page 195, line 15: Change 'percentage rate of change' to 'percentage change'
- page 196, line 10: In problem 4.16 (d), it must be:

$$f(x) = e^{-(x-2)^2/2}$$

• page 218, line 13: In the estimation of ΔI_S replace

$$\frac{(b-a)^5}{180} \cdot n$$
 by $\frac{(b-a)^5}{180n^4}$

- page 250, Table 6.2, first row of column 3: Replace '**b**³, by '**a**³,
- page 255: line 17 (third component of vector \mathbf{y}): The third component of the first vector is 570 (see vector \mathbf{y}^S on page 254), therefore the third component of vector \mathbf{y} is 570 + 3, 270 = 3, 840
- page 315: In row 8 from below, replace ' $\overline{\mathbf{x}}$ ' by ' \mathbf{x}^* '
- page 360, line 2: Replace '(P)' by '(D)'
- page 365, exercise 9.1 (a): The last inequality must be: $-x_1 + 4x_2 \ge 0$
- page 365, exercise 9.1 (b): The objective function must be: $z = x_1 + 4x_2 \rightarrow \max!$
- page 412, lines 8 and 9 from below: Replace 'Example 11.1' by 'Example 11.19'
- page 420, last line: In the numerator of b, replace '+' by '-'

• page 426, line 2: Add after last word 'Then'

there exists a $\lambda^{\mathbf{0}} = (\lambda_1^0, \lambda_2^0, \dots, \lambda_m^0)$ such that

- page 442: In problem 11.26, replace 'minimal' by 'maximal'
- page 457, Example 12.6: In the system in lines 7 to 9 from below, the terms including B must be -2B in the line for x^1 and +B in the line for x^0 (i.e., number 2 must be moved one line up). As a consequence, in line 5 from below, one gets C = -1. Thus, in line 3 replace the last term

$$-\frac{1}{2}$$
 by -1

- page 486, answer to 1.22 (a): Replace '1, 128' by '128'
- page 488, answer to 2.7 (a): It must be: s = 4/7
- page 493, answer to 4.14: Interchange 'minimum' and 'maximum', i.e.: 'local maximum at P_1 ' and 'local minimum at P_2 '
- page 507: For problem 11.5 part (b) it must be: $\mathbf{grad} f(1,2) = (6,3.6)^T$ and for problem 11.5 part (c) it must be:

$$\mathbf{grad}f(1,0) = \left(-\frac{1}{\sqrt{8}},0\right)^T \approx (-0.35,0)^T$$

- page 508, for problem 11.18 the optimal function value is C(100, 200) = 344,000
- page 508, for problem 11.21, it must be: P(30, 30, 15) = 27,102.48