

# Errata and comments list for “An Introduction to Continuous Optimization”

Michael Patriksson  
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Page	Row	Reads	Should read/Comment
11	eq. (1.1)	$\geq b_i$ and $= d_j$	$\geq 0$ and $= 0$
76	-2	has a lower value	has a lower function value
94	-13	than the other	than any of the other
98	11	simplicity	the readers' convenience
139	Exercise 5.6(a)	$x_j^* = \min\{0, c_j\}/(2\lambda^*)$	$x_j^* = -\min\{0, c_j\}/(2\lambda^*)$
165	17	means fast	means that fast
165	20	$\alpha_k = \gamma + \beta/(k+1)$	$\alpha_k = \beta/(k+1)$
165	21	where $\beta > 0, \gamma \geq 0$	where $\beta > 0$
171	Figure 6.4	A convex min-function	A concave min-function
175	14	$k \leq m+1$ such that	$k \leq m+1$ , such that
191	Exercise 6.1(a)	$q$ differentiable $\mathbf{x}(\mu)$ defined on $R$	$q$ differentiable on $R_{++}$ $\mathbf{x}(\mu)$ defined on $R_{++}$
276	Figure 11.2(b)	$\mathbf{x}_k + \alpha^* \mathbf{p}_k$	$\alpha^*$
361	Exercise 6.1(a)	$q(0) = -\infty$	$q(0) = 0$ , but $\mathbf{x}(0)$ not attained
362	Exercise 6.3		$\mathbf{x}^* = (4/3, 2/3)^T$ , $\boldsymbol{\mu}^* = (8/3, 0)^T$ , $f^* = q^* = 8/3$
365	Exercise 8.4	$z' = z - 2$	$z' = z + 2$
367	Exercise 10.5	$\mathbf{y} \geq \mathbf{0}^m$	$\mathbf{y} \leq \mathbf{0}^m$
368	Exercise 10.13	$c_4 \geq 8$	$c_4 \leq 8$
369	Exercise 11.6(b)	The gradient is zero	The point obtained is a strict local minimum
369	Exercise 11.6(c)	—	The function $f$ is convex
369	Exercise 11.12	no second RHS	$= -(\mathbf{Q}\mathbf{x}_k + \mathbf{q})$ ; strike last part of proof.
370	Exercise 11.13	Case IV	$f(x) := \frac{1}{4}x^4 - \frac{1}{2}x^2$ ; $f(x_k) \rightarrow -\frac{1}{4}$
371	Exercise 12.5	$\mathbf{x}_2 = (13/20, 5/20)$	$\mathbf{x}_2 = (11/20, 3/20)$
371	Exercise 12.5	$z$ values	the $f$ -value has been added