

# Errata

Computational Techniques of the Simplex Method

Kluwer Academic Publishers, Boston, 2003

ISBN 1-4020-7332-1

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A strange problem with the `fancybox` L<sup>A</sup>T<sub>E</sub>X package has caused some shift in equation numbering (perhaps a conflict between `fancybox` and Kluwer `kapmono` style?). When I did the typesetting I overlooked this problem. The phenomenon: equation numbers of framed equations are shifted one number up in printing. The internal counter remains uncorrupted, therefore, all subsequent unframed equations carry correct numbers. I show the “culprit” structure which caused some problem in Chapter 1 for those who want to avoid this situation. Fortunately, later I have not used framed equations. Below is the problematic structure on page 12.

```
\fbox{%  
\begin{Beqnarray} \min && \ic\T\ix \label{eq.obj2} \\  
 \text{s.t.} && \iA\ix + \iI \iz = \ib \label{eq.constr2} \\  
 && \text{and every variable is one of types 0--3.} \label{eq.type2}  
\end{Beqnarray}  
}
```

Similar structures were used at three other places.

The “resulting” problems in the framed equations are:

Page	Framed equation number(s)	
	Printed	Should read
12	(1.15) (1.16) (1.17)	(1.14) (1.15) (1.16)
13	(1.21)	(1.20)
16	(1.24) (1.25) (1.26)	(1.23) (1.24) (1.25)
17	(1.27)	(1.26)

However, references to these equations are correct with the correct (“Should read”) numbers.

## Other noticed errors:

Page	Line	Printed	Should read
6	delete line 5 from bottom	constraint type	
42	3 from bottom	$w_j(t)$	$d_j(t)$
43	9 from bottom	$\alpha_j^p$	$d_j$
91	10	are	are zero
93	10 from bottom	<b>RANGE-1 Balance</b>	<b>RANGE-1 Res-2</b>
99	3 from bottom	nonnegative	nonzero
105	last line of framed table	$a_j^i y_i \leq c_j$	$a_j^i y_i \geq c_j$
106	1st line after eq. (7.33)	nonnegative	nonzero
106	2nd line after eq. (7.34)	$\mathbf{a}_j^T \mathbf{y} \leq c_j$	$\mathbf{a}_j^T \mathbf{y} \geq c_j$
115	in eq. (7.56)	$\mathbf{M}^{-1} \boldsymbol{\delta}_{2k}$	$\mathbf{M}^{-1} \boldsymbol{\delta}_{2k+1}$
116	in eq. (7.58)	$\boldsymbol{\rho}_{2k+1} h_{2k-1}$	$\boldsymbol{\rho}_{2k+1} + h_{2k-1}$
142	10 from bottom	let $i$	let $j$
181	6	$\mathbf{R}\mathbf{x}_r$	$\mathbf{R}\mathbf{x}_{\mathcal{R}}$
196	lines 2 and 3 after (9.69)	$\mathbf{B}^{-1}$	$\bar{\mathbf{B}}^{-1}$
208	2nd line of (9.88)	$\beta_i = 0$	$\beta_i = v_i$
219	7 from bottom	1 1 2 1	1 1 -2 1
220	3	-33 2 4	-33 -2 4
220	4	-27 1 2	-27 -1 2
231	3 lines above (9.109)	$ \beta_i $	$ \beta_i - \lambda_i $
235	eq. (9.117) changes to		$\alpha_q^i = 0, \forall i \text{ where type}(\beta_i) \in \{0, 1\}$
235	eq. (9.118) changes to		$\alpha_q^i \leq 0, \forall i \text{ where type}(\beta_i) = 2$
237	15 from bottom	Stallingstalling	Stalling
243	2 from bottom	$-\varepsilon_f \leq \beta_i < \lambda_i$	$\lambda_i - \varepsilon_f \leq \beta_i < \lambda_i$
271	first line after <b>Step 4.</b>	current $\theta_P$ .	current $\theta_D$ . $\theta_P = s_{k-1}/\alpha_q^p$ .
281	3	$d_q$	$\bar{d}_\mu$
286	1st line after <b>Step 7.</b>	$s_p^k \geq 0$	$s_p^k > 0$