

Corrections and emendations (as of 26apr12) for
A Practical Guide to Splines (revised edition)
 by Carl de Boor

All items are of the form

$a/b/c$: A \rightarrow B [C]

meaning that, on **page** a , in **paragraph** or **item** b , in **line** c , the text A should be changed to the text B, with C an additional comment. A negative paragraph number b or line number c indicates a count from the bottom (of the page or the specified paragraph). For example, vi/4/-1 = vi/-3/2 ends in 'text.' Comments are rare; a missing B means that the text A is to be omitted; a missing A means that the text B is to be inserted.

Each emendation is preceded by an 'e'.

e17//2: [This anticipation or assumption permits us to compute the apparent decay exponent of the error as a function of n , but there are no theorems that claim the error $\|e_n\|$ to behave exactly like βn^α for fixed β and α .]

28/Problem 2./2: $\|\lambda\| \rightarrow \|\lambda_n\|$

34//1: $\|\hat{\beta}\| \rightarrow \|\hat{\beta}\|$

37//1: $\|\hat{\alpha}\| \leq 3\|\hat{\beta}\| \rightarrow \|\alpha\| \leq 3\|\hat{\beta}\|$

38/Problem 5./-2: $\sqrt{x} \rightarrow \sqrt{|x|}$

38/Problem 5./-1: faster \rightarrow no faster

42(9)/denominator: $\Delta\tau_{i+1} \rightarrow \Delta\tau_{i-1}$

43(13)/RHS: + \rightarrow -

65//4: $1, \dots, n-1$, with $\rightarrow 0, \dots, n$, with $\tau_0 = \tau_1$ and $\tau_{n+1} = \tau_n$, hence

66/Problem 5./1: V(21) \rightarrow V(20)

66/Problem 5.(c)/3: $\|\hat{E}'_4\| = \rightarrow \|\hat{E}_4^{(4)}\| =$

66/Problem 5.(c)/-1: V(21) \rightarrow V(20)

88/-2/-6: $f ds/k! \rightarrow f(s) ds/(k-1)!$ [thank you, Delbert Franz]

89/-2/2: $(\cdot - t_{j+1})_+^0 - (\cdot - t_j)_+^0 \rightarrow (t_{j+1} - \cdot)_+^0 - (t_j - \cdot)_+^0$ [thank you, Jörg Peters]

e90(15)/: $\cdot \rightarrow \cdot$, $t_{j+k-1} > t_j$, while $\omega_{jk} := 0$ if $t_{j+k-1} = t_j$. [Else, look up "maxim, useful" in the index.]

90/-2/-3,-1: $t_{j+1} \rightarrow t_{j+2}$

e95//1: $\cdot \rightarrow$ (Marsden [1970]).

212/10 P = 1./: [insert below it the statement: SIX1MP = 0.]

212/20 P = 0./: [insert below it the statement: SIX1MP = 6.]

212/SIX1MP = 6./(1.+Q)/: [move this line to right after the line 59 P = ...]

225/REAL .../: (1) \rightarrow (N+K)

225/DIMENSION .../: [delete this line]

231/REAL .../: (1) \rightarrow (NTAU) [twice]

231/DIMENSION .../: [delete this line]

268//3: $s_i - [\tau_i, \tau_{i+1}]f$ and $s_{i+1} - [\tau_i, \tau_{i+1}]f \rightarrow s_i \Delta\tau_i - \Delta f_i$ and $s_{i+1} \Delta\tau_i - \Delta f_i$

e336//: \rightarrow M. J. Marsden, An identity for spline functions with applications to variation-diminishing spline approximation, J. Approx. Theory **3(1)** (1970) 7-49; *p.* 95.

Answers to specific problems (at the end of chapters) are available upon reasonable request.