

Introduction to Scientific Programming and Simulation Using R

Errata as of 28 November 2013

The following errata were present in early printings but later corrected.

p17 l5 “[1] 3 4 4” should be “[1] 2 4 4”

p21 l1 “an subset” should be “subset”

p30 l17 “`show(x)`” should be “`print(x)`”

p63 l-3 “If fact” should be “In fact”

p64 l6 The parenthetical statement is incorrect and should be ignored (SE).

p152 l1 “ $37 - 255 = -218$ ” should be “ $37 - 127 = -90$ ”

p152 l22, 24 Insert \pm before d_0 in $x = d_0.d_1d_2\cdots$ and before b_0 in $x = b_0.b_1b_2\cdots$

p175 l6 “ $\epsilon/f'(a)$ ” should be “ $\epsilon/|f'(a)|$ ”

p189 l23 “Simpon’s” should be “Simpson’s”

p211 l3 should be “`# g(a.l) <= g(a.m) and g(a.m) >= g(a.r)`”

p211 l26 “`return(x - a.max*y)`” should be “`return(x + a.max*y)`”

p222 l31 If you wish to subsequently add points and lines to a contour plot, then it is much easier if you use `contour` rather than `contourplot`

p239 l7 “ $5 \times 0.0625 = 0.3125$ ” should be “ $1 - (15/16)^5$ ”

p333 l1 “In R the command `set.seed(seed)` puts you at point `seed` (assumed integer) on the cycle of pseudo-random numbers.” should be “For a given value of `seed` (assumed integer), the command `set.seed(seed)` always puts you at the same point on the cycle of pseudo-random numbers.”

p338 l16 “ $F_X(x) = 2(x - 1)$ ” should be “ $F_X(x) = (x - 1)/2$ ”

p365 l12 The sum should be divided by $2n$

p371 l6 “ $\sqrt{2} \arctan\left(\frac{x}{2}\right)$ ” should be “ $\sqrt{2} \arctan\left(\frac{x}{\sqrt{2}}\right)$ ”

p374 l10 “`theta_hat`” should be “`matrix(theta_hat, n, N, byrow=TRUE)`”

p397 l10 “ $I(u)(v - u)$ ” should be “ $hI(u)(v - u)$ ”

p444 l28 “colour() or color()” should be “colours() or colors()”

Here are errata discovered since those above were corrected, and thus present in all printings.

p45 l2 The harmonic mean is $n / \sum_{i=1}^n 1/x_i$ (JL)

p68 l21 “8” should be “9”

p75 Table 5.2 Replace `nfactorial` with `nfact2` throughout

p107 Exercise 6.5 The third column of the data is the ‘off’: the time the race starts. The data then comes in pairs (p_i, t_i) . (GH)

p200 l7 a better example is $I = \int_0^1 5x^4 dx = 1$

p208 l8 “the slope at \mathbf{x} ” should be “the curvature at \mathbf{x} ”

p301 l-7 “first” should be “ k -th”

p327 l-10 X_n should not be bold

p429 l-5 ...where $Z_i \in \{0, 1/2, 1\}$ is half the number of crossings...

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