Errata for Early Fourier Analysis by Hugh L. Montgomery

Current as of May 3, 2015

page, line Correction
3, –5 Replace ‘sequence if’ by ‘sequence if’.
24, –11 Delete ‘and only if’.
45, 2 Replace ‘$e((m^2 - n^2)/p)$’ by ‘$e(k(m^2 - n^2)/p)$’.
46, 10 Replace ‘an arithmetic function’ by ‘an even arithmetic function’.
46, 11 Replace $f(-n)/q$ by $f(n)/\sqrt{q}$.
46, 11 Replace $\hat{g}(k) = g(k)$ by $\hat{g}(k) = \sqrt{q}g(k)$ for all $k$.
47, 7 Replace $(p * q)(n)$ by $(p * r)(n)$.
57, 10 Replace ‘$e((-nm/m)$’ by ‘$e(-nx/m)$.
57, 10 Replace ‘$e(-n(k + x)/m)$’ by ‘$e(-n(k - 1 + x)/m)$’.
57, 10 Append ‘$dx$’ at the right end of the line.
62, 2 Replace ‘4’ by ‘2’.
74 Replace Exercise 1 by the following: Suppose that $f$ and $g$ are members of $L^1(\mathbb{T})$, and that $c$ is a constant. Show that $(cf) * g = f * (cg) = c(f * g)$.
76, –14 Replace ‘$e((n - k))$’ by ‘$e((n - k)x)$’.
81, 6 Replace ‘$x < x_1$’ by ‘$x < x_1 + 1$’.
81, 18 Replace ‘for all $x$’ by ‘for all $k$’.
81, –1 Replace ‘4’ by ‘2’.
84, 1 Replace ‘$\cos 2\pi x$’ by ‘$\cos 2\pi nx$’.
84, –9 Between ‘$=\pi$’ and ‘$\cos 2\pi N x$’ insert ‘+1’.
85, 3 Replace ‘$n = 1$’ by ‘$n = 0$’.
107, –11 In part (c), the ‘$\sin \pi x$’ in the numerator of the fraction should be ‘$\sin \pi N x$’.
109, 2 Replace $\hat{f}$ by $\hat{f}$.
109, 5 Replace ‘$\cos(2\pi nu)$’ by ‘$\cos 2\pi nu$’.
136, –5 In (5.6), the right hand side of the identity should be
$$\int_0^1 |f(x)|^2 \, dx - \sum_{n=-N}^N |\hat{f}(n)|^2,$$
155, –4 In Exercise 7(c), $T_r(x_j) = 0$ if $j \neq r$.
156, –13 Replace ‘Corollary 6.2’ by ‘Theorem 6.1’.
156, –9 Replace ‘$1 + \frac{1}{N+1}$’ by ‘$1 + \frac{1}{N}$’.
221, –13 Replace ‘IF’ by ‘If’.