

Multiplicative Number Theory I. Classical Theory

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Errata

page	line	item
6	15	The value given of $\text{li}(10^{13})$ is incorrect; it should be 346065645809.01.
7	−10	For ‘ k ’ read ‘ K ’.
17	−2	insert comma before ‘then’.
41	−10	The typeface in the first line under the first sum is too small.
57	7	For ‘ $1/d$ ’ read ‘ $1/d'$ ’.
64	12	After ‘Show that’ insert ‘if $q > 1$, then’.
70	14	The right hand side of the inequality should read $\text{li}(\log n) + O((\log n) \exp(-c\sqrt{\log \log n}))$
70	16	The right hand side of the inequality should read $\text{li}(\log n) + O((\log n) \exp(-c\sqrt{\log \log n}))$
92	3	After ‘ Λ_1 ’ insert ‘= 1’.
92	6	Replace ‘ $g([d, e])$ ’ by ‘ $b([d, e])$ ’.
117	−9	Replace ‘Lemma 4.2’ by ‘Lemma 4.3’.
122	8	For ‘ $\frac{L'}{L}(s, \chi)$ ’ read ‘ $\frac{L'}{L}(s, \chi_0)$ ’.
126	1	The condition ‘ $n \equiv a \pmod{q}$ ’ should be ‘ $p \equiv a \pmod{q}$ ’.
126	2	The condition ‘ $n \equiv a \pmod{q}$ ’ should be ‘ $p \equiv a \pmod{q}$ ’.
126	3	The condition ‘ $n \equiv a \pmod{q}$ ’ should be ‘ $p \equiv a \pmod{q}$ ’.
131	13	For $\left(1 - \frac{1}{N(\mathfrak{p})}\right)^{-1}$ read $\left(1 - \frac{1}{N(\mathfrak{p})^s}\right)^{-1}$
133	3	For ‘be written’ read ‘may be written’.
133	−5	For ‘ $L(1, \chi)$ ’ read ‘ $L(1, \chi) \neq 0$ ’.
138	−3	For ‘ x_0^σ ’ read ‘ x^{σ_0} ’.
139	12, 13	‘ si ’ should be ‘ si ’.
147	5	Replace ‘ $+\frac{1}{2}$ ’ by ‘ $+\frac{1}{4}$ ’, ‘ $-\frac{1}{2}$ ’ by ‘ $-\frac{1}{4}$ ’, ‘ $+\frac{i}{2}$ ’ by ‘ $+\frac{i}{4}$ ’, and ‘ $-\frac{i}{2}$ ’ by ‘ $-\frac{i}{4}$ ’.
158	−5	Replace $\sum_{s \rightarrow 0^+}$ by $\lim_{s \rightarrow 0^+}$.
193	3	For ‘ $\cos\theta$ ’ read ‘ $\cos \theta$ ’.

Errata, continued

page	line	item
258	4	For ‘contraction’ read ‘contradiction’.
258	8	For ‘arithmetic’ read ‘arithmetical’.
284	7	For ‘for some integer k .’ read ‘for some integer k , when $(n, p) = 1$.’
286	–7	Replace ‘ $e(a/q)$ ’ by ‘ $e(-a/q)$ ’.
310	–5	Replace $\chi(2)$ by $\bar{\chi}(2)$.
311	4, 6, 8	Replace N/q by q/N in three places.
318	3	For ‘ l ’ read ‘ ℓ ’.
346	–9	For ‘ $M_h(R)$ ’ read $M_h(R) = \max_{ z \leq R} h(z) $.
347	3	For ‘ K_2 ’ read ‘ \mathcal{K}_2 ’.
348	–13	For ‘Exercise 10.1’ read ‘Exercise 10.2.1’.
348	–12	For ‘Exercise 10.4’ read ‘Exercise 10.2.4’.
369	–9	For ‘(5.23)’ read ‘(5.25)’.
369	–8	For ‘ $e^{n/x}$ ’ read ‘ $e^{-n/x}$ ’.
374	3	Replace ‘(10)’ by ‘(11.10)’.
377	8	Delete ‘(a)’.
377	12, 13	Delete all of part (b) of the exercise.
386	–5	Replace ‘ x ’ by ‘ n ’ in two places.
386	–7	Replace ‘ x ’ by ‘ n ’.
389	7	Replace ‘ e^{C_0} ’ by ‘ e^{-C_0} ’.
409	–2	Replace $+(-1 + \cosh 1/z) \log z$ by $-(-1 + \cosh 1/z) \log z$.
411	11	For ‘ $\phi(s)$ ’ read ‘ $\Phi(s)$ ’.
423	–4	For ‘ $\gamma_2 < -\gamma_1$ ’ read ‘ $\gamma_2 < -\gamma_1/2$ ’.
423	–3	Replace ‘ $\gamma_2 < -\gamma_1$ ’ by ‘ $\gamma_2 < -\gamma_1/2$ ’ in two places.
435	–2	Replace ‘Corollary 13.13’ by ‘Theorem 13.13’.
438	6	In the second sum, replace ‘ $\frac{\Lambda(n)}{n \log n}$ ’ by ‘ $\frac{1}{kp^k}$ ’.
442	–9	Between ‘Put’ and ‘ σ'_1 ’ insert ‘ $\sigma_0 = 1 + 1/\log x$ ’.

Errata, continued

page	line	item
442	-5	For 'Theorem 13.22' read 'Theorem 13.23'.
442	-4	For ' $\int_{\sigma_1} \sigma_0$ ' read ' $\int_{\sigma_1}^{\sigma_0}$ '.
442	-2	For 'Theorem 13.22' read 'Theorem 13.23'.
444	-1	Replace $ L(s, \chi) $ by $ \log L(s, \chi) $.
445	4	The displayed formula should read $ \log L(s, \chi) \leq \log \log \log q\tau + O(1)$.
445	7	Replace $ L(s, \chi) $ by $ \log L(s, \chi) $.
446	-5	For ' $B_1(x/d^2)$ ' read ' $B_1(\{x/d^2\})$ '.
461	2	For ' $2\pi S(t) \leq c \log \log T$ ' read ' $S(t) \leq \frac{c}{\pi} \sqrt{\frac{1}{2} \log \log T}$ ', and for ' \int_{∞}^c ' read ' $\int_{-\infty}^c$ '.
464	4	Replace 'and' by 'and if $\Theta > 1/2$, then'
465	-6	Replace 'since $\Theta \geq 1/2$, it follows that' by 'if $\Theta > 1/2$, then'.
465	-11	For 'Lemma 1' read 'Lemma 15.1'.
492	11	For ' $\xi \leq x \leq b$ ' read ' $a \leq x \leq \xi$ '.
500	12	For ' $\zeta(2) = \pi/6$ ' read ' $\zeta(2) = \pi^2/6$ '.
501	6	For '(1)' read '(B.1)'.
503	-8	For 'N' read ' N '.
508	7	Replace ' $B_1(x)$ ' by ' $B_1(\{x\})$ '.
508	-5	For ' c ' read ' C '.
508	-2	Replace ' $B_1(x)$ ' by ' $B_1(\{x\})$ '.
508	-1	Replace ' $B_2(x)$ ' by ' $B_2(\{x\})$ '.
520	5	For 'constatnt' read 'constant'.
530	-8	For ' \int_0^{∞} ' read ' \int_0^1 '.
535	-7	Replace ' $f(k)$ ' by ' $\widehat{f}(k)$ '.
536	-2	For ' Z ' read ' \mathbb{Z} '.
539	2	For ' $\widehat{f}(k)$ ' read ' $\widehat{F}(k)$ '.
551	-22	For 'powe series' read 'power series'.