

Errata

- p. 7 l. 4 for “ $t - Du$ ”, read “ $t - u\sqrt{D}$ ”
- p. 59 l. 6 for “ Q_i ”, read “ Q_{i+1} ”
 l. 11 for “ Q_i ”, read “ Q_{i+1} ”
- p. 119 l. 18–19 for “such that $D > 0$, $\sqrt{D} \notin \mathbb{Q}$ ”, read “such that $\sqrt{D} \notin \mathbb{Q}$ ”
- p. 151 l. 12 for “[Mol95]”, read “[Mol95a]”
 l. 13 for “[Mol95]”, read “[Mol95a]”
- p. 169 l. 28–29 for “The converse...ambiguous ideal.³⁶”, read “The converse is not true: if $\Delta > 0$ is a fundamental discriminant, $N(\epsilon_\Delta) > 0$, and none of the t distinct prime divisors of Δ is congruent to 3 (mod 4), then there are exactly 2^t ambiguous classes that do not contain an ambiguous ideal.³⁶” (See discussion item 1.)
- p. 183 l. 12 for “³⁶This result... pp. 189–190.”, read “³⁶See Theorem 3.3 and Remark 3.3 of [Mol95b].”
- p. 235 l. 4 for “[Mol95]”, read “[Mol95a]”
- p. 276 l. -7 for “ \mathfrak{a} ”, read “ \mathfrak{a}^n ”
- p. 290 l. 20 for “ $d_{i+1}^2 \mathfrak{b}_{i+1}^2 = \lambda_{i+1} \mathfrak{b}_i^2$ ”, read “ $d_{i+1}^2 \mathfrak{b}_{i+1} = \lambda_{i+1} \mathfrak{b}_i^2$ ”
- p. 442 l. 5 for “ $R_0 = U$ ”, read “ $R_{-2} = R_0 = U$ ”
 for “ $C_0 = -1$ ”, read “ $C_{-2} = C_0 = -1$ ”
 l. 10 (Line deleted.)
 l. 20 for “ rs ”, read “ rS ”
 l. -5 for “ $B_{i-1} = \sigma|C_{i-1}|$ ”, read “ $B_{i-1} = |C_{i-1}|$ ”

¹Last updated: January 5, 2009.

- l. -1 for “ $B_{i-2} = |C_{i-2}|$ ”, read “ $B_i = |C_i|$ ”
 for “ $j = 2$ ”, read “ $j = 2$ and $B_i = |C_i|$ ”
- p. 443 l. 6 for “ Q'_{i+1} ”, read “ Q'_{i+2} ”
 l. 14 for “ P'_{i+2} ”, read “ P'_{i+3} ”
- p. 449 l. 5 Insert before line: “8A: **if** $a < 0$ and $b < 0$ **then** $a \leftarrow |a|, b \leftarrow |b|$ **end if**”
- p. 455 l. 18 for “ T_{i-4} ”, read “ T_{i-3} ”
- p. 456 l. -4 for “Case 1. step 2”, read “Case 1. Step 2”
 l. -1 for “ B_{i-2} ”, read “ B_{i-3} ”
- p. 457 l. -12 for “ $\lfloor 2^s \sqrt{D} \rfloor$ ”, read “ $B_{i-3} \lfloor 2^s \sqrt{D} \rfloor$ ”
 l. -8 for “ $\lfloor 2^s \sqrt{D} \rfloor$ ”, read “ $B_{i-4} \lfloor 2^s \sqrt{D} \rfloor$ ”
- p. 458 l. 2 for “ (\mathbf{b}, d, k) ”, read “ $c \in \mathbb{Z}^{\geq 0}; (\mathbf{b}, d, k)$ ”
- p. 477 l. 23 for “[Mol95]”, read “[Mol95a]”
 l. 24 Insert before line: [Mol95b] _____, *The palindromic index - A measure of ambiguous cycles of reduced ideals without any ambiguous ideals in real quadratic orders*, J. Théorie des Nombres Bordeaux **7** (1995), pp. 447–460.

Discussion of corrections

- 1.) (*p. 169, l. 28–29*) In the discussion of ambiguous ideals and cycles, the following statement, which we quoted from [Coh62], is known to be false:

The converse is not true: if $\Delta > 0$ and $N(\epsilon_\Delta) > 0$ then there may exist at most one ambiguous class without an ambiguous ideal.

Mollin [Mol95b] (see Remark 3.2, p.453) identifies this error in [Coh62] and gives the correct statement for maximal orders (Remark 3.3, p.454). Thus, this sentence, and endnote 36, should be replaced with the statements shown in the Errata section.

In addition, the definition we give for an ambiguous cycle, namely a cycle of reduced \mathcal{O}_Δ -ideals contained in an ambiguous class, is somewhat non-standard. The usual definition is that a cycle of reduced ideals is ambiguous if for every ideal $\bar{\mathfrak{a}}$ in the cycle, the conjugate ideal $\bar{\bar{\mathfrak{a}}}$ is also in the cycle. However, in the case that all ideals in the cycle are invertible, for example, when Δ is fundamental (as is the case in Chapter 7), then these definitions are equivalent.

We thank John Robertson for alerting us to this error.