page 18, line 6: $G$ and $H$ are interchanged. It should read “Then the $G$-module $\mathbb{Z}[G] \otimes_{\mathbb{Z}[H]} M$ is in fact a $G$-lattice; . . .” (Thanks to Robert Fossum.)

page 21, line -1: A backslash is missing in front of “emph”. It should be “The group $G$ is called $k$-reflection group on $V$ if $G = R_k^L(G)$.” (Thanks to Robert Fossum.)

page 60, Table 3.1: The Hironaka decomposition of the invariant algebra $\mathbb{Z}[L]^G$ for the group $G \cong S_3$ (third group in table) is missing the summand $\mu_3 \mathbb{Z}[\mu_1, \mu_2]$. The correct entry in this row should be: “semigroup algebra $\mathbb{Z}[\mu_1, \mu_2] \oplus \mu_3 \mathbb{Z}[\mu_1, \mu_2] \oplus \mu_3^2 \mathbb{Z}[\mu_1, \mu_2]$”.

page 103, line -1: “$k$-reflection” should be replaced by “bireflection”; so

$$R^2(\mathcal{H}) = \langle g \in \mathcal{H} \mid g \text{ acts as a bireflection on } L \rangle.$$ 

page 126, line 8 and page 127, line 4: The list of “primes” $p = 47, 112, 223, \ldots$ is wrong as stated; it should be $p = 47, 113, 233, \ldots$. Thus, on page 127, it should read “In particular, the aforementioned non-rational extensions $\mathbb{Q}(\text{Cl}_p)/\mathbb{Q}$ ($p = 47, 113, 233, \ldots$) are not stably rational either.” (Thanks to Don Passman.)

page 126, lines -9 and -12: $K$ should be replaced by $k$ twice: it should read “. . . Saltman [175] for infinite $k$ . . .” and “. . . $E/F$ of $k$ with group $G$ . . .”

page 149, line -4: The answer to Problem 2, when stated more generally for $k$-reflections, is definitely negative. Alex Zalesskii has shown me the following example. The simple group $\text{SL}_2(\mathbb{F}_{32})$ has an irreducible Steinberg module, $V$, of dimension 32 over $\mathbb{Q}$. The restriction of $V$ to the Sylow 2-subgroup of $\text{SL}_2(\mathbb{F}_{32})$ is the regular module. Therefore, each involution of $\text{SL}_2(\mathbb{F}_{32})$ acts as a 16-reflection. Furthermore, the involutions generate $\text{SL}_2(\mathbb{F}_{32})$. On the other hand, if $g \in \text{SL}_2(\mathbb{F}_{32})$ is an element of order 31, then its fixed points on $V$ have dimension 2 and $\langle g \rangle$ is an isotropy group on $V$. Thus, this isotropy group is only generated by a 30-reflection.

page 150, line 12: Omit “over $\mathbb{Z}$”.

page 154, line 5 after Problem 7: Replace $|G|/r$ by $r/|G|$ (twice).
Problem 14 (page 159): This has been solved in the affirmative; the reference is:


Now all multiplicative invariant fields of transcendence degree at most 3 are known to be rational over the base field.

Example 8.11.3 (page 122); see also Problem 4 (page 150/1): The Cohen-Macaulay problem for “vector invariants” is resolved (in the positive): the Cohen-Macaulay property follows as a special case of Theorem 1.2 in