Revisions to seventh printing: *Introduction to Lie Algebras and Representation Theory*

3 In line 11, remove bar over $e_{i,\ell+i}$.

6 In the definition of $[IJ]$ (fourth paragraph of 2.1), replace $\sum x_i y_i$ by $\sum[x_i y_i]$.

13 In line -8, delete space between "theorem" and period.

46 In exercise 2, replace "whose Weyl group is naturally isomorphic to" by "whose Weyl group coincides with the group". Similar modifications should be made in the last paragraph of 9.2 and on page 64, line -4.

54 In exercise 1, add to the hint in brackets "; use Lemma 10.2B"

60 In (6), add a right parenthesis: "(*a simple chain in* Γ)."

72 In exercise 7, replace the hint in brackets by "[Show that each $\varepsilon_j^* = \sum_i a_i \varepsilon_i$ with all $a_i \geq 0$.]"

72 Add Exercise 14: "If $\lambda \in \Lambda^+$ is strictly lower than δ, prove that $\langle \lambda, \alpha \rangle = 0$ for some $\alpha \in \Delta$. [Use Exercise 8.]"

74 Near the bottom of the page, replace the two sentences beginning "However, the root system axioms ..." by "But here the inner products arise from the Killing forms and are determined by the Cartan invariants (see 8.5): $4/(\beta, \beta) = \sum_{\alpha \in \Phi} \langle \alpha, \beta \rangle^2$. So the isomorphism $\Phi \to \Phi'$ must come from an isometry."

95 Add to Exercise 1: "Is this true for arbitrary L?"

96 In the second line of 18.2, replace (17.4) by (17.5).

108 Expand lines 5–6 of 20.2 as follows:

"these are obviously the only possible maximal vectors in this case (use from 8.4 the fact that $[L_\alpha L_\beta] = L_{\alpha+\beta}$ whenever $\alpha, \beta, \alpha + \beta \in \Phi$, together with Lemma 10.4A)."

110 In line -10, replace 20.2(d) by 20.2(e). Similarly, in line -9 replace 20.2(e) by 20.2(f).

119 In line -2, replace "Then (21.3)" by "Then by (21.3)"

131 Replace line 4 by:

> "for all $\mu \in \Lambda$, it follows from Exercise 8 below that all linear functions take the"
>
> Current line 4 reads:
>
> "for all $\lambda \in \Lambda$, hence for all $\mu \in \Lambda$, it follows that all linear functions take the"

134 Replace the opening of the second sentence of line 2 of Exercise 8 by:

> "Use this to complete the proof that"
>
> Current wording:
>
> "Use this to give another proof that"

142 In Exercise 12, replace "Deduce from Steinberg's formula" by "Prove".

Most of these revisions were suggested by Amir Aazami, Daniel Drucker, J.C. Jantzen, Steven Sam, and J.R. Stembridge.

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