Errata and Corrections to *Elliptic Diophantine Equations*

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Acknowledgements. I would like to thank the following people for sending me comments and corrections: Andrew Bremner, Nikolaos Katsipis.

- Errata (highlighted) due to jaundiced Ralph[1]:

page vii, line 1: "This book 170 is about...". Take out "170".

page 53, line 5: " **13 7 Computing the elliptic logarithm** ". Take out "**13 7**".

page 68, table 6.1, first line below table-label: " 0 10 $Q(u) = au^4 + bu^3 + cu^2 + du + e^2$ ". Take out "0 10".

page 82, line 15: "Thesecond class consists of the series 10 5 ". Take out "10 5".

page 82, line -8: "where 10 0 ω is ...". Take out "10 0".

page 83, line -16: " **10 6 Computing the finite extension** $\mathbb{Q}(\alpha_\mu, \ldots, \alpha_{\mu+k_0})$ ". Take out "**10 6**".

page 124, relation (10.7): "$2^{k(k+1)/2}(k+\frac{1}{2})^{k+1}B_1(N)^{k+1}$, **013** ". Take out "013".

page 127, table 10.1, right most column in the first line below table-label: " 12 5 $P^C = (u, v)$ ". Take out "12 5".

page 129, table 10.2, left most column in the first line below table-label: " n_1, n_2, n_3 12 5 ". Take out "12 5".

page 133, table 10.3, left most column in the first line below table-label: " n_1, n_2, T^E 12 3 ". Take out "12 3".

page 135, table 10.4, left most column in the first line below table-label: " 12 3 n_1, n_2". Take out "12 3".

[1] Ralph is the imp of mischief in a printing house, according to Chambers English Dictionary. Admittedly, this time Ralph turned out very inventive!

- Misprints and oversights due to the author:

✓page viii, line 14: Replace $y = 136/27$ by $y = 17/9$.

✓page 17, relation (2.21): Instead of $H(1 : a/b) = H(b : a)$ write $\log H(1 : a/b) = \log H(b : a)$.

✓page 20, two lines above relation (2.28): Instead of E^P write P^E.

✓page 22, first line of relation (2.32): Replace $h(x, y)$ by $h(1 : x : y)$.

✓page 24, relation (2.37): In the right-hand side, replace $2^N P$ by $2^N P^D$.

✓page 26, line 5: Replace c_1 by ρ.

✓page 34, line 3: Replace $\wp'(r)$ by $\wp'(z_1)$.

✓page 63, line 4: After $(e_1, +\infty)$ take out full stop and add "if $\sigma = -1$ and $\mathrm{x}(u) \in (e_1, x_0) \subset (e_1, +\infty)$ if $\sigma = +1$."

✓page 63, line 9: Replace "decreasing" by "increasing".

✓page 63, line 17: Replace $(6ez + 3td + ct^2 6e^2)/(3t^2)$ by $(6ez + 3dw + cw^2 + 6e^2)/(3w^2)$.

✓page 66, last line: Replace "Proposition 5.4" by "Theorem 5.2".

✓page 70, line -4: Left-hand side of (7.13) should be (a, b, c, d, e).

✓page 79, relation (8.6), last line: Insert a coefficient 2 to $u(u - 1)^3$.

✓page 82, lines -6 and -7: In both lines replace m_i by μ_i.

✓pages 89-91. Section 8.5 modified. Lemma 8.5.1 was corrected; as a consequence Section 8.5 was modified and simplified at various points.

✓page 90, line -17: Immediately after $\rho_1 = -81029/2$ take out "and $\rho_2 =$".

✓pages 91-92: Throughout Section 8.6, replace all occurences of v_s by v_s. More specifically, v_s appear in page 91, lines 2, 3 (two occurences), -1 (two occurences) and in page 92, line 1 (two occurences), 3 (three occurences).

✓page 96: Replace 22730 by 22763 in lines 8, 9, 16, 18.

✓page 97, relation (8.26): In the right-hand side replace $h(P)$ by $h(x(P))$.

✓page 103, relation (8.7): Replace $\mathcal{V}(u, v)$ by $\mathcal{V}(x, y)$.

✓page 109, line 7: Replace 0 by $-5/12$.

✓page 109, relation (8.11): Replace u^{-k/ν_s} by t^{-k/ν_s}.

✓page 118, line -1: Insert minus sign before P_0.

✓page 119, lines 6 and 10: Insert minus sign before P_0^E.

✓page 119, line -12: Replace $(d, d_1, d_2, d_0) = (1, 1, 1, 0)$ by $(\delta, d_1, d_2, \delta_0) = (-1, 1, 1, 0)$.

✓page 129, table 10.2, first entry below n_1, n_2, n_3: In " $-1, -1, O$", replace O by 0.

✓page 134, line 11: Replace 49/400 by 81/100.

✓page 136, last three lines: Replace "We have, thus, proved $\ldots (u,v) = (0,0), (243,-3)$ *as its only integer solutions.*" by the following:
"Taking into account Table 10.4 and the "small" points which we computed on page 90, after Example$^{\text{Step 4}}$, we have the following proposition:
Propositon 10.2.4 *The equation* $3v^5+3uv^3-271uv-3u^2 = 0$ *has* $(u,v) = (0,0), (1,-3), (243,-3)$ *as its only integer solutions.*"

✓page 138, line 14: Replace $\tilde{O}$ by $\tilde{\mathcal{O}}$.

✓page 138, line 16: Replace $C_1(\mathbb{F}_p), C_0(\mathbb{F}_p)$ by $C_1(\mathbb{Q}_p), C_0(\mathbb{Q}_p)$, respectively.

✓page 141, line 2: In "$\ldots$is at least τ" replace τ by k.

✓page 141, line 2: Replace t (two occurrences) by z.

✓page 142, line 1: Replace ≤ -4 by ≤ -2.

✓page 142, beginning of line 4: In $-\nu_p(u(Q)) > N/2$ insert a factor $1/2$ in the left-hand side.

✓page 146, line -6: Replace $2\nu_q(\kappa) - b_q$ by $-2\nu_q(\kappa) + b_q$.

✓page 173, line -3: Replace *Acta Arith.* **67** by *Acta Arith.* **68**.