

Errata for the book
Many Variations of Mahler Measures.
A Lasting Symphony
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- p. 14, Theorem 2.1:
The final sentence of statement should read as follows: “Furthermore, if $M(P) \leq c = x_0 + 10^{-4}$, then either $P(x)$ has a zero $\pm x_0^{1/m}$ for some $m \in \mathbb{Z} \setminus \{0\}$ or $P(x)$ is reciprocal.”
- p. 19, Lemma 2.6:
The part “is the result of application of the differential operator $\frac{1}{(k-1)!} \frac{d^k}{dx^k}$ to the first one” should refer to the operator $\frac{1}{(k-1)!} \frac{d^{k-1}}{dx^{k-1}}$ instead.
- p. 26, Exercise 2.7:
In parts (b) and (c) of the exercise, the word “irreducible” should be dropped (three times).
- p. 72, Exercise 5.11(b):
The denominator of the rational expression on the left-hand side should be $9(1 + 3x)^4$; the correct form of identity to verify is
$${}_3F_2\left(\frac{1}{4}, \frac{1}{2}, \frac{3}{4} \mid \frac{256x}{9(1 + 3x)^4}\right) = \frac{1 + 3x}{1 + x/3} {}_3F_2\left(\frac{1}{4}, \frac{1}{2}, \frac{3}{4} \mid \frac{256x^3}{9(3 + x)^4}\right).$$
- p. 79, Hint to Exercise 6.4:
The first sentence should read “Observe that $0 \leq |1 + x + y - xy| \leq \sqrt{8}$ on the torus $|x| = |y| = 1$.”
- p. 81, Chapter notes:
The correct form of the first conjectural evaluation should read
$$m((1 + x)(1 + y)(x + y) + z) \stackrel{?}{=} -3L'(f_{14}, -1) = 0.6233530933\dots;$$
that is, the part $m((x + 1/x)(y + 1/y)(x/y + y/x) + z)$ must be dropped out.

- p. 86, l. 10:
The reference [158, Theorem 5.4] should be [158, Section 7, Theorem 5.4].
Another reference for (7.5) is [1, Chapter 5, 6.12] (in the reference list below).
- p. 88, Exercise 7.3(c):
An assumption on the path γ should be added, namely: if an endpoint p of γ belongs to the set $S_{f,g}$ of zeros and poles of f and g , then the argument of $\gamma(t)$ with respect to a local coordinate at p is of bounded variation when $\gamma(t)$ approaches p .
- p. 143: After Definition A.11, the reference [143, Proposition 1.4] should be [143, Section 3, Proposition 1.4].

References

- [1] C. A. WEIBEL, *The K-book. An introduction to algebraic K-theory*, Graduate Studies in Mathematics **145** (American Mathematical Society, Providence, RI, 2013).