

Errata and comments for the 2009 edition of the book *Classical and quantum orthogonal polynomials in one variable* by M. E. H. Ismail

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These are errata and comments for the book

M. E. H. Ismail, *Classical and quantum orthogonal polynomials in one variable*, Cambridge University Press, reprinted corrected paperback edition, 2009, ISBN 978-0-521-14347-9.

Many errata in the original 2005 bound edition were corrected in the 2009 edition. The following are errata in the 2009 edition. See also an (almost disjoint) list of errata for the 2009 edition by Mourad Ismail.

p.123, (4.10.2): On the right-hand side insert an additional factor $\sqrt{2}$.

p.148, (5.4.5): In the last term on the right-hand side replace $Q_n^\lambda(x; a, b)$ by $Q_{n-1}^\lambda(x; a, b)$.

p.148, (5.4.10): Replace the lower parameter of the ${}_2F_1$ on the right-hand side by $-n - \lambda + 1 + i\Phi(\theta)$.

p.152, (5.5.8): Comment: There is kind of a third case: the limit case for $\lambda \downarrow 0$ of $a = a'\lambda$ ($a' > 0$), $b = b'\lambda$ ($b' \in \mathbb{R}$). Then (see (5.4.5)) $Q_1^0(x; 0a', 0b') = x + b'/(a' + 1)$ and (see (5.5.4)) $\alpha_n = 0$ ($n > 0$), $\beta_n = \frac{1}{4}$ ($n > 1$). $\beta_1 = \frac{1}{2}(a' + 1)^{-1}$.

p.229, (8.2.20): On both lines in the numerator replace the plus sign by a minus sign.

p.229, last three lines of Proof of Theorem 8.2.4: Three lines before the end replace (8.2.20) by (8.2.19). In the last line before the end replace (8.2.19) by (8.2.20).

p.444, (16.4.3): $c_{n,k}(\mathbf{a}, \mathbf{b})$ should be $c_{n,k}(\mathbf{b}, \mathbf{a})$