

Typos in Probability: Theory and Examples, 3rd Edition

This list covers only math errors, not spelling, punctuation, or incorrect headers which are caused by the way TeX makes pages.

Page 4, part (iv) of (1.1): $F(x-) = P(X < x)$

Page 4, line -3: $\{X \leq y\} \downarrow \{X \leq x\}$

Page 8, Exercise 1.10: 1. for $x \in (g(\alpha), g(\beta))$ [missing]

2. the answer is $(1/a)f((y-b)/a)$

Page 12, (3.1a): superfluous "If".

Page 15, (ii) should assume $g \geq 0$ and $g(x) \rightarrow \infty$ as $|x| \rightarrow \infty$. Otherwise we can't subtract $h(0)$ from h to reduce to $h(0) = 0$.

Page 16, line (b): $Y > M$ should be $|Y| > M$.

Page 24, lines 2–4 of proof. It is trivial to check that $\Omega \in \mathcal{L}$. The facts being quoted here are relevant when checking $\mathcal{L} \supset \sigma(\mathcal{A}_1)$ implies (4.2').

Page 32, third display from bottom: $E(\bar{X}_{n,1}^2/n)$ [bar is missing]

Page 34, next to last display: $E\bar{X}_{n,k} = \sum_{j=1}^{m(n)} 2^j 2^{-j} = m(n)$.

Page 35, Exercise 3.5: Suppose $0 < b \leq a$

Page 43: reference to exercise 3.10 of Chapter 2 (two thirds of the way down the page) should be to Exercise 3.8.

Page 44, line -8: Using (5.6) now [not (5.5)]

Page 61, line 9: (4.5) should be (4.4)

Page 66, lines 11, 12: dx should be deleted

Page 67, Exercise 8.7. Suppose the X_n are independent

Page 70, second line after (H1). Missing subscripts on $\mu = EX_i^+ - EX_i^-$

Page 95 line 1: add "for $x \in hZ$ " at the end of first line.

Page 158: Example should be numbered 7.5, not 7.4.

Page 158 in (7.17): " $t^{3/2}$ " should be " $t^{2/3}$ ".

Page 160, last line: $-\epsilon^2$ should be $-\epsilon^{-2}$.

Page 198: the sentence just before (3.6) should go just before Theorem (3.7).

Page 198, line -6: in $\{(x, y) : y \geq 0\}$

Page 200, fourth line of the proof: $1 < k < n$ should be $1 \leq k < n$.

Page 222, line 9: $\int_A g(X) dP$, not $g(Y)$

Page 231, definition of $(H \cdot X)_n$, when $n = 0$ the sum is empty so $(H \cdot X)_0 = 0$

Page 233, line 2: $E(K \cdot Y)_n \geq 0$, i.e., Y not X

Page 239, line 3. Second fraction should be:

$$\frac{(m+1)!(n-m)!}{(n+2)!/2}$$

page 242 top: $\sum_{m=1}^{\infty} \log(q_m) > -\infty$ is a tail event so Kolmogorov's inequality implies $\nu(X=0) \in \{0, 1\}$

Page 243, top: X_n converges to X in $L^1(\nu)$, so $\nu(X=0) < 1$ and the application of Kolmogorov's 0-1 law cited before the proof implies $\nu(X=0) = 1$.

Page 243, line 1 of subsection d: $i, n \geq 1$, not ≥ 0

Page 248. The remark should refer to Exercise 4.5.

Page 250, line 9: parentheses needed around $(p-1)$ in the denominator.

Page 253: Reference to Kronecker's Lemma at the end of the proof of (4.10) should be to (8.5) of Chapter 1, not (8.1) of Chapter 1.

Page 265, line 5: $P(G|B \text{ gets } r \text{ votes})$, i.e., B not A

Page 269, last sentence of proof of (7.1): Since $E|X_N| < \infty$ and X_n is uniformly integrable.

Page 270, (7.5): If N is a stopping time with $EN < \infty$ then

Page 306, Example 4.7: the exercise referred to should be 3.10, not 3.9.

Page 337, Exercise 1.7. ν should be independent of Y .

Page 359, Exercise 6.1: The application does not work since (c) does not hold. As a counterexample consider ξ_1 uniform on $\{0, 1, 2, 3\}$ and $\chi_{n+1} = \chi_n + 1 \pmod{4}$.

Page 359, line -1: $L_{0,m} + L_{m,n} \leq L_{0,n}$

Page 360, Exercise 6.2: EL_1 and EL_2 should be $EL_{0,1}$ and $EL_{0,2}$.

Page 392, last equation in proof of (4.6): $E_0(1/2; T_a < t)$

Page 397, line -3: $h_k(\theta, t)$ should be $f_k(x, t, \theta)$

Page 430, equation (8.11): a factor of $2 \cdot (-1)^m$ is missing from the summand.

Page 434: $M(t) \leq \sup\{|B(s) - B(t)| : t_{k-1} \leq s, t \leq t_{k+2}\}$

Page 442, lines -4: $F_i(x)$ should be $F_i(x_i)$

Page 443, line 4: $(a, b]$ is shorthand for $(a_1, b_1] \times (a_d, b_d]$

Page 459, in Exercise 4.3: j_m should be a_j .

Page 467, just before Fubini. The measures should be μ_1 and μ_2 not μ and ν .

Page 494: the change of variables formula is on page 17, not page 16.

Page 495: Law of the iterated logarithm page 435 not 129.