

Errata
Introduction to Probability
Dimitri P. Bertsekas and John N. Tsitsiklis
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Most of these are corrections to the first printing of the book, and have been fixed in the second printing. Books from the 2nd printing can be identified by the entry “Second printing” below the ISBN number in the copyright page in the front.

- p. 24, l. –6: “ $\mathbf{P}(A_1 \cap A_2 \cap \dots \cap A_3)$ ” should read “ $\mathbf{P}(A_1 \cap A_2 \cap \dots \cap A_n)$ ”
- p. 49, near end of Example 1.31: “ $T_1, T_1,$ and T_3 ” should read “ $T_1, T_2,$ and T_3 ”
- p. 111, beginning of 2nd paragraph: “ $\mathbf{P}(A > 0)$ ” should read “ $\mathbf{P}(A) > 0$ ”
- p. 112, l. –9: “ $\tilde{X} = X - \mathbf{E}[Y]$ ” should read “ $\tilde{X} = X - \mathbf{E}[X]$ ”
- p. 117, last line: “ $p_Y(y)$ ” should read “ $p_Z(z)$ ”
- p. 189, Fig. 3.25: in the right-hand-side part of the figure, the shaded part corresponding to negative x (the small triangle to the left of the origin) should not be shaded
- p. 194, l. 4: “ $(1 - p\lambda)e^{-\lambda x}$ ” should read “ $(1 - p)\lambda e^{-\lambda x}$ ”
- p. 197, second line of part (b): “parameter p ” should read “parameter λ ”
- p. 205, bottom: last six occurrences of “ Z ” should be “ z ”:

$$\begin{aligned} F_Z(z) &= \mathbf{P}(\min\{X, Y\} \leq z) \\ &= 1 - \mathbf{P}(\min\{X, Y\} > z) \\ &= 1 - \mathbf{P}(X > z, Y > z) \\ &= 1 - \mathbf{P}(X > z)\mathbf{P}(Y > z) \end{aligned}$$

- p. 220, l. 6: For the geometric random variable, “ $k = 0, 1, \dots$ ” should read “ $k = 1, 2, \dots$ ”
- p. 220, l. –5: For the exponential random variable, “ $(s > \lambda)$ ” should read “ $(s < \lambda)$ ”
- p. 221, Example 4.13: in the definition of $p_Y(y)$, “if $x =$ ” should be replaced by “if $y =$ ”, three times
- p. 234, 5th line of shaded box: “We assume that all of these random variables are independent”, should read, “We assume that all of these random variables are independent and identically distributed”
- p. 249, l. 14: “Since X and Y are independent” should read “Since \bar{X} and \bar{Y} are independent”
- p. 264: “Schwartz” should read “Schwarz” (3 times)
- p. 318, Figure 6.4: the “ r ” next to the arc from node (2,4) to node 1 should be deleted
- p. 318: “ $\mathbf{P}(X_0 = i_0, X_1 = i_1, \dots, X_{i_n} = i_n)$ ” should read “ $\mathbf{P}(X_0 = i_0, X_1 = i_1, \dots, X_n = i_n)$ ” (3 times)
- p. 340, two-thirds down: “Since $a_i = 0$ ” should read “Since $a_0 = 0$ ”
- p. 350, l. 6: $\lim_{n \rightarrow \infty}$ should read $\lim_{t \rightarrow \infty}$
- p. 403, l. –8: “Example 7.14” should read “Example 7.7”
- p. 408, second and third equations from the bottom should read:

$$\begin{aligned} \mathbf{E}[(X_1 + \dots + X_n)^4] &= n\mathbf{E}[X_1^4] + 3n(n-1)\mathbf{E}[X_1^2 X_2^2]. \\ \mathbf{E}[(X_1 + \dots + X_n)^4] &\leq (n + 3n(n-1))\mathbf{E}[X_1^4] \leq 3n^2\mathbf{E}[X_1^4]. \end{aligned}$$

- p. 413: “Inequality, Schwartz” should read “Inequality, Schwarz”
- p. 415: “Schwartz” should read “Schwarz”