Errata

A Modern Introduction to Probability and Statistics
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In the main text

p.336 Solution to Quick Exercise 22.2. "Rewriting $\hat{\alpha} = \bar{y}_n - \hat{\beta}$," should read "Rewriting equation (22.2): $\hat{\alpha} = \bar{y}_n - \hat{\beta}\bar{x}_n$,".

p.366 h^{-1} en g^{-1} should be h^{inv} en g^{inv}.

p.393 Third line of this page: $\theta_0 \neq \theta_0$ should be $\theta \neq \theta_0$.

p.402 In Quick Exercise 27.2: "at level $\alpha = 0.05$".

p.405 Replace "annual mortality rate (percentage of deaths)" by "annual mortality rate (number of deaths per 100 000)".

In the figures

p.237 in Figure 16.4 left hand side the y-axis should be expressed in seconds—as the right hand side.

p.264 In the caption of Figure 17.12 "and empirical distribution function" is added.

p.330 In Figure 22.1: instead of "The regression line $y = \alpha x = \beta$." the text labeling the regression line should read "The regression line $y = \alpha + \beta x$."

p.406 Replace "mortality rate (%)" by "mortality rate" in Figure 27.3. Also: multiply the numbers on the vertical axis by 1 000.

In the exercises

p.39 $\boxdot$ symbol has been added in Exercises 3.14 and 3.16.

p.39 Exercise 3.16**b** is not complete. Addendum:

> The "unconscious" way to do this is to replace $\mathrm{P}(D)$ by the answer you found in **a** and then perform the calculation from part **a** again. If you do it the *conscientious* way, you try to compute $\mathrm{P}(D \,|\, S \cap T)$, where S is the event "the second test says you have the disease". You will find that you need the independence assumption $\mathrm{P}(S \cap T \,|\, D) = \mathrm{P}(S \,|\, D)\mathrm{P}(T \,|\, D)$ and a similar one for D^c.

p.52 In Exercise 4.4: add "(once!)" to "each coin is tossed again".

p.113 Exercise 8.16 is pointing to a non-existing exercise in Chapter 11. Action: remove the 'Remark'.

p.113 Add in Exercise 8.17: 'continuous' (it points to Exercise 8.9).

p.144 Exercise 10.1 has been replaced by a completely new exercise. Although not wrong, the old exercise was somewhat peculiar since it was taking expectations of hair colors.

p.146 For the sake of uniformity: exchange a en b in Exercise 10.7 en change $p_X(a)$ en $p_Y(b)$ into $\mathrm{P}(X = a)$ and $\mathrm{P}(Y = b)$.

p.203 Exercise 14.1 is not wrong, but its solution is 1, which is confusing for certain students. The question now is $\mathrm{P}(X_1 + \cdots + X_{144} > 264)$; the answer is then $1 - \Phi(-1)$.

p.241 In Exercise 16.4, it is better to give the sample mean as 492/11 instead of 44.7). Similarly write $\sqrt{482/11}$ for the standard deviation for the Wick data in Exercise 16.5.

p.281 Since Exercise 18.6**a** is the same as Exercise 5.11 this has been set in the text.

p.371 Exercise 24.9: "$\leq c_u$" should be "$\geq c_u$".

p.428 In Exercise 28.6 **d** en **e** S_p^2 should be changed to S_d^2.

In the answers and full solutions

p.445 The full solution answer to Exercise 2.14**b** is not correct: "candidate wins the car" is the event $\{(a,b),(a,c)\}$.

p.435 Answer to Exercise 4.1**c**: 25/36 instead of 253/36.

p.450 In the Full solution of Exercise 6.12 replace "We sell the our shares" by "We sell our shares".

p.450 In the Full solution of Exercise 7.15**a** a ")" and "^{2}" a should be interchanged.

p.452 Full solution to Exercise 9.9**c** is not correct: A factor 2 is missing in the second integral.

p.438 Answer van Exercise 11.1**a** is not correct: for k between 7 and 12 the summation runs over $\ell = k-6,\ldots,6$. Also: in the answer of Exercise 11.1**b** the last $2N$ should be N.

p.457 Remove the **e** following Exercise 12.1. Also: replace 1,2,3,4,5 by a,b,c,d,e.

p.458 Full solution to Exercise 13.4**c**: change "size 0.2 or"..."or" to "size 0.2 or larger occurs"

p.439 The answer to Exercise 13.8**a**: change "where $\bar{Y}_n$ as in" to "with $\bar{Y}_n$ as in"; also change "the standard deviation" in **a** to "variance."

p.439 Answer to Exercise 13.8**b**: change 801 in to 799.

p.439 Answer to Exercise 14.6**a**: $P(X<26)\approx 0.5910$.

p.463 In the full solution to Exercise 18.8**a**: replace "$\bar{x}_n$ is" by "$\bar{x}_n^*$ is".

p.464 In the full solution to both 18.8**b** and 18.8**c**: replace "$\bar{x}_n$ is" by "$\bar{x}_n^*$ is".

p.464 In the full solution of Exercise 19.1**b**: $g''(x) = x^{-3/2}/4$.

p.466 In the full solution of Exercise 21.8**b**:
the equation should be $3839\theta^2 + 1655\theta - 64 = 0$.

p.443 In the answer of Exercise 26.6**b** the critical region consists of integers: $\{1536, 1537, \ldots\}$.

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