Errata for
"Combinatorics: The Art of Counting"
(Revised September 1, 2023)

In the list that follows p/l (respectively, p//l) refers to the lth line from the top (respectively, bottom) of page p, ignoring figures. Also, $A \longleftarrow B$ means A is to be replaced by B.

3//17 set of tiles $\longleftarrow$ sequence of tiles
3//10 $\mathcal{T}_0 \longleftarrow \#\mathcal{T}_0$
3//9 $\mathcal{T}_1 \longleftarrow \#\mathcal{T}_1$
17
22/9–10 Let i be the smallest such index and let j be the first index after i where repetition occurs. $\longleftarrow$ Let j be the smallest index such that v_j equals an earlier vertex in the sequence and let v_i be that earlier vertex.
28//2 $\operatorname{std}\sigma \longleftarrow \operatorname{std}\sigma'$
37/16–17 bijection, that is, when $n = k \longleftarrow$ bijective and $n = k$ are positive integers
49/6 Rogers-Remanujan $\longleftarrow$ Rogers-Ramanujan
47//11 andis $\longleftarrow$ is
59/8 Gessle $\longleftarrow$ Gessel
61, two lines above Proposition 2.6.1: matrix $C(G) \longleftarrow$ matrix $C = C(G)$
69/2 Gessle $\longleftarrow$ Gessel
79/13 We induct on k where the case $k = 0$ is left to the reader. If $k > 0 \longleftarrow$ We do a double induction on k, l where the cases $k = 0$ and $l = 0$ are left to the reader. When $k, l > 0$
82/18 the that range $\longleftarrow$ that the range
84/15 for any $n \longleftarrow$ for $n = 1$
85/9 $n > N \longleftarrow k > N$
100/16 to the enumerating $\longleftarrow$ to enumerating
102//17 $A\ 6 \supseteq B \longleftarrow A \not\supseteq B$
104/11 Exercise 14(b) of Chapter 1 $\longleftarrow$ Exercise 19(b) of Chapter 2
104/14 $\phi^{-1}(O') = 1 \longleftarrow \#\phi^{-1}(O') = 1$
104/15 $\phi^{-1}(O') = 2 \longleftarrow \#\phi^{-1}(O') = 2$
104/17 $\phi^{-1}(O') = 2 \longleftarrow \#\phi^{-1}(O') = 2$
104/21 $\phi^{-1}(O') = 2 \longleftarrow \#\phi^{-1}(O') = 2$
109//4 Use part (b) $\longleftarrow$ Use parts (a) and (b)
110//6 two way $\longleftarrow$ two ways
113//15 $b > \min B_j \longleftarrow b > \min B_{i+1}$
114/1–9 Throughout this exercise, one should use the inversion statistic, inv, rather than the major index, maj.
120//15 $\pi_k \longleftarrow \pi_{k+1}$
120//14 k is odd $\longleftarrow$ k is even
120//10 k is odd $\longleftarrow$ k is even
120//9 even $k \longleftarrow$ odd k
136/14 show that $\longleftarrow$ show that, for $n \geq 1$,

136/16 show that $\longleftarrow$ show that, for $n \geq 0$,
143//5 *upper-order ideals* $\longleftarrow$ *Upper-order ideals*
145/13 $X/Y \longleftarrow Y/X$ (in two places)
150/10 finite $\longleftarrow$ finite, nonempty
151/10 $z, y, z \longleftarrow x, y, z$
172/2 right-hand $\longleftarrow$ bottom
173/14 $y \in I(x) \longleftarrow y \in I(X)$
173/16 $I(X) \to (X) \longleftarrow I(X) \to I(X)$
177//8 12(c) $\longleftarrow$ 12(a)
180 & ff Use f_ϕ for F_ϕ so there can be no confusion with the factorial function of P.
182//20 $s \in \mathbb{C} \longleftarrow s$ is an integer greater than 1
182//18 Add at the end of the sentence: for s with real part greater than 1.
192//17 function $\longleftarrow$ which is an analytic continuation of the series definition of $\zeta(s)$
184//3 a poset $P \longleftarrow$ a finite poset P
190//2 $\#\mathcal{O} \mid \#X \longleftarrow \#\mathcal{O} \mid \#G$
193//5 $4^2 \longleftarrow 2^4$
197//2 we say $\longleftarrow$ we saw
199/2 $\binom{X}{k}^g \longleftarrow \#\binom{X}{k}^g$
205/5 since cycles commute $\longleftarrow$ since disjoint cycles commute
214//4 polynomials $\longleftarrow$ polynomials with nonnegative coefficients
222/13 $\displaystyle\sum_{l(\lambda)=n} \longleftarrow \sum_{\ell(\lambda)=n}$
224//10 Gessle $\longleftarrow$ Gessel
227/14 Gessle $\longleftarrow$ Gessel
228//7 Gessle $\longleftarrow$ Gessel
231/14 to be replace $\longleftarrow$ to be replaced
231/17 to be replace$c' := c \longleftarrow c := c'$
237//1 $x^{\operatorname{des}\pi} \longleftarrow x^{\operatorname{des}\pi} + 1$
238/13 Note $\longleftarrow$ Recall that linear extensions were defined in Section 5.5. Note
240/7 (7.23) yields. $\longleftarrow$ (7.23) yields
242/5 $r_{\pi_k} \longleftarrow r_{\pi_k}(P_{k-1})$
245/16 $P_{k-1} \longleftarrow P_{k-1}$, assuming $j \geq 2$. When $j = 1$, a similar proof will work
244//14 $\operatorname{st} U \longleftarrow \operatorname{sh} U$
268//17 $7M_{121} \longleftarrow M_{121}$
269//10 impose by $\alpha \longleftarrow$ imposed by α
278/7 $\sigma \in \mathfrak{S}_n(\Pi) \longleftarrow \sigma \in \mathrm{Av}_n(\Pi)$
278//14 $\sigma \in \mathfrak{S}_n(\Pi) \longleftarrow \sigma \in \mathrm{Av}_n(\Pi)$

Thanks to Eli Bagno, David Garber, Cullen Haselby, Shalom Eliahou, John Lentfer, Tamsen McGinley, Astrid Olave-Herrera, Nick Ovenhouse, Ankit Sahu, Jenny Zhan, and Philip B. Zhang for catching some of these errors.