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 ← B means A is to be replaced by B.

3//17 set of tiles ← sequence of tiles
3//10 \( T_0 \) ← \#\( T_0 \)
3//9 \( T_1 \) ← \#\( T_1 \)
17

22/9–10 Let \( i \) be the smallest such index and let \( j \) be the first index after \( i \) where repetition occurs. ← 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 std \( \sigma \) ← std \( \sigma' \)
37/16–17 bijection, that is, when \( n = k \) ← bijective and \( n = k \) are positive integers
49/6 Rogers-Remanujan ← Rogers-Ramanujan
47//11 andis ← is
59/8 Gessle ← Gessel
61, two lines above Proposition 2.6.1: matrix \( C(G) \) ← matrix \( C = C(G) \)
69/2 Gessle ← Gessel
79/13 We induct on \( k \) where the case \( k = 0 \) is left to the reader. If \( k > 0 \) ← 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 ← that the range
84/15 for any \( n \) ← for \( n = 1 \)
85/9 \( n > N \) ← \( k > N \)
100/16 to the enumerating ← to enumerating
102//17 \( A \ 6 \supseteq B \) ← \( A \not\supseteq B \)
104/11 Exercise 14(b) of Chapter 1 ← Exercise 19(b) of Chapter 2
104/14 \( \phi^{-1}(O') = 1 \) ← \( \#\phi^{-1}(O') = 1 \)
104/15 \( \phi^{-1}(O') = 2 \) ← \( \#\phi^{-1}(O') = 2 \)
104/17 \( \phi^{-1}(O') = 2 \) ← \( \#\phi^{-1}(O') = 2 \)
104/21 \( \phi^{-1}(O') = 2 \) ← \( \#\phi^{-1}(O') = 2 \)
109//4 Use part (b) ← Use parts (a) and (b)
110//6 two way ← two ways
113//15 \( b > \min B_j \) ← \( b > \min B_{i+1} \)
114/1–9 Throughout this exercise, one should use the inversion statistic, inv, rather than the major index, maj.
120//15 \( \pi_k \) ← \( \pi_{k+1} \)
120//14 \( k \) is odd ← \( k \) is even
120//10 \( k \) is odd ← \( k \) is even
120//9 even \( k \) ← odd \( k \)
136/14 show that ← show that, for \( n \geq 1 \),
136/16 show that $\leftarrow$ show that, for $n \geq 0$,
143//5 upper-order ideals $\leftarrow$ Upper-order ideals
145/13 $X/Y \leftarrow Y/X$ (in two places)
150/10 finite $\leftarrow$ finite, nonempty
151/10 $z, y, z \leftarrow x, y, z$
172/2 right-hand $\leftarrow$ bottom
173/14 $y \in I(x) \leftarrow y \in I(X)$
173/16 $I(X) \to (X) \leftarrow I(X) \to I(X)$
177//8 $12(c) \leftarrow 12(a)$
180 & ff Use $f_{\phi}$ for $F_{\phi}$ so there can be no confusion with the factorial function of $P$.
182//20 $s \in \mathbb{C} \leftarrow s$ 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 $\leftarrow$ which is an analytic continuation of the series definition of $\zeta(s)$
184//3 a poset $P \leftarrow$ a finite poset $P$
190//2 $\#\mathcal{O} \mid \#X \leftarrow \#\mathcal{O} \mid \#G$
193//5 $4^2 \leftarrow 2^4$
197//2 we say $\leftarrow$ we saw
205/5 since cycles commute $\leftarrow$ since disjoint cycles commute
222//13 $\sum_{l(\lambda)=n} \sum_{t(\lambda)=n} \leftarrow \sum_{l(\lambda)=n}$
224//10 Gessle $\leftarrow$ Gessel
227//14 Gessle $\leftarrow$ Gessel
228//7 Gessle $\leftarrow$ Gessel
231/14 to be replace $\leftarrow$ to be replaced
231/17 to be replaced $c' := c \leftarrow c := c'$
237//1 $x^{\text{des}\pi} \leftarrow x^{\text{des}\pi} + 1$
238//13 Note $\leftarrow$ Recall that linear extensions were defined in Section 5.5. Note
240/7 (7.23) yields. $\leftarrow$ (7.23) yields
242/5 $r_{\pi_k} \leftarrow r_{\pi_k}(P_{k-1})$
245/16 $P_{k-1} \leftarrow P_{k-1}$, assuming $j \geq 2$. When $j = 1$, a similar proof will work
244//14 st $U \leftarrow$ sh $U$
268//17 $7M_{121} \leftarrow M_{121}$
269//10 impose by $\alpha$ $\leftarrow$ imposed by $\alpha$
278/7 $\sigma \in \mathfrak{S}_n(\Pi) \leftarrow \sigma \in \text{Av}_n(\Pi)$
278//14 $\sigma \in \mathfrak{S}_n(\Pi) \leftarrow \sigma \in \text{Av}_n(\Pi)$

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