

Updated listing of typos in Blundell² text, new entries highlighted, and newer

Last update March 4, 2009

Text typos:

p. 2: The US budget deficit is overstated by orders of magnitude

p. 44, Exercise 4.2: Example 4.3, not 3.2

p. 44, Exercise 4.9: Example 4.2, not 3.1

p. 45, bottom of highlighted region: replace Chapter 1 by Chapter 8

p. 52, Exercise 5.2: atomic mass of He is 4

p. 56, 1st line of eq. 6.14: dv and $d\theta$ are written twice

p. 59-60, Exercise 6.4: Number density should be provided.

p. 72, Exercise 8.1: Specify room temperature as in Example 8.1.

p. 75: 3 lines after eq. 9.2: dv rather than dc

Caption of Fig. 9.2: velocity \rightarrow velocity

Fig. 9.1: For the drawn velocity distribution, there should be no force at the bottom.

p. 97, 5 lines above eq. 10.56: $v = \eta/\rho$ (not c_p)

p. 111, second last bullet: replace C_v by C_p

p. 120, Exercise 12.6, Eq. 12.40: replace L by $L/2$

p. 127, line after eq. 13.19: replace Q_1 by Q_ℓ

p.140: 3 lines after 14.25: maximum \rightarrow maximum

p. 177, line 2 of eq. 16.84: replace "Maxwell's relations" by "reciprocal theorem"

p. 177, line 3 of eq. 16.84: replace "reciprocity theorem" by missing theorem C.42½ (see erratum for p. 444)

p. 179, Exercise 16.7: Specify that ρ is the number density, not the mass density. (I suppose it could be the mass density if one adjusts the constant by $C_v \ln(m^\gamma)$.)

p. 192, Exercise 17.3: This is a great problem, but many students had difficulty understanding it. A sketch would help. In any case, it should be made clearer that what you mean by the length is the distance between the beginning and the end of the chain.

One student was troubled by the case of $N_- > N_+$. You could either use $|L|$ as the length or say WLOG assume $N_+ > N_-$.

p. 214, eq. 20.27: after the second $=$, $-\Delta/2T$ rather than $-\Delta/T$

p. 241, eq. 22.67: $K = p_B/p_A$, not p_A/p_B

Next line: $K \ll 1$

Following line $K \gg 1$

eq. 22.70: $dG = (\mu_B - \mu_A) dN_B$

eq. 22.71: p_B/p_A , not p_A/p_B

Top marginal note: the upper and lower limits on the integral should be switched

p. 243: eq. 22.82 & 22.84, no subscript j for the p in the denominator

p. 246, Exercise 22.5, line 2: $N!$, not $N1$ (online correction omits !)

p. 249: line after eq. 23.11, replace K^{-1} by K^{-4}

p. 260: eq. 23.60, on the right side it should be g_2/g_1 rather than g_1/g_2

eq. 23.61, the sign on the exponential should be plus (i.e. nothing) rather than minus.

p. 290: eq. 26.41: No V on the left, just p ; then $-a/V^2$, not $+$.

pp. 337-8: The factor $(2S+1)$ is double counted in the partition function and the density of states. Eqs. 30.6 and 30.7 are correct.

p. 338: eq. 30.8: missing \ln before Z

p. 340: eq. 30.22: argument of theta should be $(E_F - E_k)$ (note that $\mu \rightarrow E_F$ as $T \rightarrow 0$)

p. 347, eq. 30.55: first expression should be $1/(z^{-1} - 1)$, $z = \exp(-\beta\mu)$

p. 444 between C.41 and C.42: dy rather than dz

p. 444, "C.42½: $(\partial y / \partial x)_z = (\partial y / \partial w)_z / (\partial x / \partial w)_z$

Chap. 7: this kind of flux is different from the flux most students recall from E&M. Wikipedia has a nice discussion!

Solutions:

6.5a: Integral should be to $\pi/2$, not π .

9.5 Values of d: ??????????????????

13.7 The solution makes use of the idea that there is no change in entropy in the most efficient situation, but entropy has not yet been introduced!