

Errors in "Concepts in Thermal Physics" (2007 reprint)

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- page 2: the US budget deficit should be closer to 10^{13} \$
- page 44: Ex.(4.2) Example 3.2 should be Example 4.3
- page 52: Exercise (5.2) atomic mass of He is 4

- page 56: 1st line of eqn 6.14 dv and $d\theta$ written twice
- page 62: eqn 7.1, exchange 235 and 238. This expression is of course the ratio of effusion rates.
- page 64: dM/dt should be $|dM/dt|$ in 7.12 and in the line before
- page 67: Exercise (7.1) better mention that the residual gas is N_2 and $T = 300K$
- page 75: 3 lines after eqn 9.2, dv rather than dc
- page 79: line 10 "per unit time per *unit area*"
- page 80: In the first bullet point, it is λ which is proportional to n^{-1} and not κ
- page 90: remove the "1/2" in Eq. (10.21)
- page 97: 5 lines after eqn 10.56, $v=\eta/\rho$
- page 109: Ex. (11.2) all the quantities are molar. Better to use u_m , c_m , etc.
- page 111: second last bullet, C_v should be C_p
- page 119: Exercise (12.3) A and B do not have to be constant
- page 131: Exercise (13.4) heat capacity of ideal gas is constant
- page 140: Eq. (14.25) overall (-) sign missing
- page 167: Eq. (16.24) $V = +(\partial G/\partial p)_T$
- page 171: P should be p in eqn 16.49
- page 173: Ex. (16.24) in the first line should be $(\partial C_p/\partial p)_T$
- page 177: line 2 of eqn 16.84, replace Maxwell's relations by reciprocal theorem
- page 192: Exercise better mention $(\partial f/\partial T)_L > 0$
- page 214: eqn 20.27, after the second =, $-\Delta/2T$ rather than $-\Delta/T$
- page 221: eqn 21.1 and following line: normalization should be $2^{3/2}/V^{1/2}$, not $1/V^{1/2}$ [though this doesn't affect following argument]
- page 241: eqn 22.67, $K=p_B/p_A$; the line under eqn 22.67, $K \ll 1$ and the line below this line $K \gg 1$.
- page 241, eqn 22.70, $dG=(\mu_B-\mu_A)dN_B$.
- page 241: eqn 22.71, $K=p_A/p_B$ should be $K=p_B/p_A$.
- page 243: eqn 22.82 and 22.84, no subscript j for the p in the denominator
- page 249: line after eqn 23.11, replace K^{-1} by K^{-4}
- page 255: eqn 23.44 should be negative.
- page 256: On this page, U should be the energy density u .
- page 260: eqn 23.60, on the right side g_2/ g_1 , not g_1/g_2 ; eqn 23.61 the sign on the exponential should be plus
- page 288: Fig. 26.6. Interchange "gas" and "liquid" labels (obviously!)
- page 290: eqn 26.41: No V on the left, just p , minus sign in front of a/V^2
- page 296: Exercise (26.1) the volume $V = V_c = 3b$
- page 305: below Eq. (28.1) should be transition temperature not critical temperature

- page 337: There should not be $(2S+1)$ in eqn 30.3.
- page 338: Eq. 30.8, missing \ln before Z .
- page 340: eqn 30.22, argument of Θ should be $(E_k - E_F)$
- page 345: there should be an n inside the integral of 30.48.
- page 346: Sentence before (30.51) should say "Equation 30.43 ..."
- page 347: eqn 30.55, first expression should be $1/(z^{-1}-1)$
- page 444: between eqn C.41 and C.42, dy rather than dz
- page 445: delete 2 in the numerator in eqn C.55