

Errata R. Shankar Fundamentals of Physics Nov 21, 2016

1. Page 40 Eqn. 3.4 should read $m_E = 1 \cdot \frac{a_1}{a_E}$
2. Page 63 Line 2: "If the magnitude of the displacement is the same, so are the magnitudes of velocity and acceleration.."
3. Page 151 .. $a_{Ti} = r_i\alpha$ is F_{Ti}
4. Page 152 ".. while the radial part and the internal forces will keep the body rigid and furnish the requisite centripetal force."
5. Page 211 "by reversing the sign of θ in Eqns. 13.3 and 13.4"
6. Page 213 Formula 13.18 in denominator replace $\frac{vw}{c^2}$ by $\frac{uw}{c^2}$.
7. Page 216 Eqn 13.21

$$\Delta t' = \frac{\tau_0 - 0 \cdot \frac{u}{c^2}}{\sqrt{1 - \frac{u^2}{c^2}}} = \frac{\tau_0}{\sqrt{1 - \frac{u^2}{c^2}}}$$

8. Page 238 Eqns. 14.40 and 14.41 $a'_3 = a_3 \rightarrow a'_2 = a_2$ and $a'_4 = a_4 \rightarrow a'_3 = a_3$
9. Page 239, Eqn. 14.44 remove the huge square root put in just curved brackets as follows:

$$\left(1 - \frac{1}{c^2} \left(\frac{dx}{dt}\right)^2\right).$$

10. Page 261 Sec 16.2 line 3: $(1 - x)^{n-1} \rightarrow (1 + x)^{n-1}$
11. Page 262. Line 3 end the sentence after the word "pendulum". (with no reference to any figure.)
12. Page 264 Eq. 16.27 should read $\cos x = 1 - \frac{x^2}{2} + \dots$
13. Page 268 line 6 Eqn. 16.40 should read 16.41
14. Page 316 Below Eqn. 19.2 "This is just half the mass of the segment ..."
15. Units for specific heat have to be corrected in FIVE places:
Page 362 2 lines above Eq. 21.3 and twice in 21.3: cal/g or $kcal/kg$ must become

$$cal/(g \cdot K)$$

$$kcal/(g \cdot K)$$

Do the same in Page 363 line 2 of penultimate paragraph

Do the same in Page 364 in two line paragraph to read $c_2 = 1kcal/(kg \cdot K)$

16. Page 413 "parts of Q_{0i} may be negative..."
17. Page 414, caption for Fig. 24.1 " If it happens that $\Delta Q_i < 0...$ "
18. Page 405: In Eqn. 23.24 nT_1 should be nRT_1 , and in Eqn. 23.25 nT_2 should be nRT_2