

Errata for The Feynman Lectures on Physics Volume II New Millennium Edition (Newly Reported)

The errors in this list appear in *The Feynman Lectures on Physics: New Millennium Edition* and earlier editions; errors validated by Caltech will be corrected in future printings of the *New Millennium Edition* or in future editions.

Errors are listed in the order of their appearance in the book. Each listing consists of the errant text followed by a brief description of the error, followed by corrected text.

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II:32-9, Table 32-2

This table includes several errors. The most significant was a transcription error in the 2nd row, column D; Feynman wrote it on his blackboard “.990” which was incorrectly transcribed as “0.970”. In fact, when this number is calculated it comes out closer to 0.989. Many small errors introduced by rounding were compounded in the calculation, so we have recalculated this table more precisely, as shown below, with changed numbers shown red. The original precision of each number is preserved, with rounding done after all calculations are made.

| Fraction of sucrose by weight | Density (g/cm ³) | n at 20° | Moles of sucrose per liter, N ₂ /N ₀ | Moles of water per liter, N ₁ /N ₀ | $3(n^2-1)/(n^2+2)$ | N ₁ α ₁ | N ₂ α ₂ | N ₀ α ₂ |
|-------------------------------|------------------------------|----------|--|--|--------------------|-------------------------------|-------------------------------|-------------------------------|
| 0 | 0.9982 | 1.333 | 0 | 55.5 | 0.617 | 0.617 | 0 | - |
| 0.30 | 1.1270 | 1.3811 | 0.989 | 43.8 | 0.697 | 0.488 | 0.209 | 0.211 |
| 0.50 | 1.2296 | 1.4200 | 1.798 | 34.16 | 0.759 | 0.380 | 0.379 | 0.211 |
| 0.85 | 1.4454 | 1.5033 | 3.59 | 12.05 | 0.887 | 0.1340 | 0.753 | 0.210 |
| 1.00 | 1.588 | 1.5577 | 4.64 | 0 | 0.967 | 0 | 0.967 | 0.208 |
| (avg n for sucrose crystal) | | | | | | | | |
| 1.5376 | | | | | | | | |
| 1.5651 | | | | | | | | |
| 1.5705 | | | | | | | | |
| 1.557733333 | | | | | | | | |

II:40-8, Fig 40-7

The vertical distance ‘h’ from the top of the water to the hole in the tank (more or less) should be indicated.