Errata for
Learn Physics with Functional Programming

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If a reader of the book knows of additional errors, please send them to me for inclusion in this list.

- p. 161, Exercise 10.9: [discovered by Andrii Zymohliad, 2024 Jun 27] The expression for $\mathbf{v}_{\text{Ball}}(t)$ given at the beginning of the problem is incorrect. The correct expression is

$$\mathbf{v}_{\text{Ball}}(t) = \mathbf{v}_0 + \mathbf{g}t.$$

- p. 238, code, top of page: [discovered by Dan Farmer, 2024 Aug 7] The drag coefficient, which is the number immediately after `fAir`, should be 2 rather than 1. The correct code is as follows.

```
pedalCoastAir2 :: Time -> Velocity
pedalCoastAir2 = velocityFtv 0.1 20 (0,0)
                 [\( t,_v) -> pedalCoast t
                 ,\(_t, v) -> fAir 2 1.225 0.5 v]
```

- p. 578, penultimate paragraph:

  > The effectful functions we've written ... are not really part of the "elegant code" promised in this book's subtitle.

  This sentence refers to an earlier version of the subtitle, "Beautiful Ideas Deserve Elegant Code". While I believe very much in the sentiment expressed in that earlier subtitle, we decided to use a longer subtitle that clarified the role of Haskell. The sentence should read

The effectful functions we've written, those like `gradientVectorPNG` with `IO ()` in their type that *do* something, are certainly useful for producing graphs and animations, but they are not the best examples of the power of a functional language for physics.

- p. 582: The web address for gnuplot is misspelled. The correct address is `gnuplot.info`, not `gnuplut.info`. The pdf version of the book links to the correct web page.