2.13.6: Footnotes

1. There is a standard piece of terminology which is that the “focal point” is the point lying on the optical axis at a distance from the mirror equal to the focal length. This term isn't particularly helpful, because it names a location where nothing normally happens. In particular, it is *not* normally the place where the rays come to a focus! --- that would be the *image* point. In other words, we don't normally have $d_i = f$, unless perhaps $d_o = \infty$. A recent online discussion among some physics teachers (carnot.physics.buffalo.edu/archives, Feb. 2006) showed that many disliked the terminology, felt it was misleading, or didn't know it and would have misinterpreted it if they had come across it. That is, it appears to be what grammarians call a “skunked term” --- a word that bothers half the population when it's used incorrectly, and the other half when it's used correctly.
2. I would like to thank Fouad Ajami for pointing out the pedagogical advantages of using both equations side by side.