Astronomy 210 Spring 2011 Homework Set #8 – Erratum

Problem 2, Part (c)

There was a deadly sign error in the expression for distance modulus. The correct expression should read

$$\mu = m_V - M_V = \frac{-5}{-5} + 5\log_{10}d\tag{1}$$

where d is in parsecs. Note that in class, the definition was given as $\mu = 5 \log_{10}(d/10 \text{ pc})$ which of course is equivalent to eq. (1).

Management regrets the error.