Problem Set #1

Due Friday, February 27 by 4pm to Dickinson 104

Unless otherwise indicated, all problems come from "The Cosmic Perspective," 8e

Note: On this problem set (and future problem sets), I will use the following notation: [Chapter].[Problem #]
So, the first book problem assigned this week is Problem #39 in Chapter 1.

1. What is the main college phone number in scientific notation? Our course number? Show how to divide the college phone number by our course number using scientific notation.
2. Problem 1.39 *Scaling the Local Group of Galaxies*
3. Problem 1.41 *Distances by Light* (Hint: 1 lyr = 9.46×10^{15} m)
   (Note: While Google could do the work for you here in calculating the numbers of meters in the units you are given – and you can/should absolutely use Google to check your work – the work you turn in must show ***how*** you do these unit conversions).
4. Problem 1.44 *Galaxy Scale*