Comments on Project 1 drafts

1. In most situations, there is no need for quote marks or parenthesis around variable names. You can think of this as being similar to writing "my friend Bob" rather than "my friend "Bob"" or "my friend (Bob)".

> **Example**
> ...the density σ and the radius R...

2. A colon is *not* use before a displayed equation if the equation is needed to complete the sentence. Note that the sentence in the next example is not complete without the displayed expression.

> **Example**
> We can factor out constants to write this as
> $$N = 2\pi \int_0^R r\sigma(r)\,dr.$$

3. Figures and tables are generally not included as parts of sentences. Instead, label each figure and table. Refer to each in your text.

> **Example**
> ...as shown in Figure 18.

Each figure or table should be place *after* the first reference to it in the text.

4. Use "substitute" rather than "plug" in formal writing.

> **Example**
> We now use this to substitute for σ in our definite integral to get
> $$N = 2\pi\sigma_0 \int_0^R r(\sigma_0 - \frac{\sigma_0}{R}r)\,dr.$$

5. In a string of equalities, do not repeat the left-side of the expression.

> **Example**
> We now simplify to get
> $$\begin{aligned} N &= 2\pi\sigma_0(\frac{R^2}{2} - \frac{R^3}{3R}) \\ &= 2\pi\sigma_0(\frac{R^2}{6}) \\ &= \frac{1}{3}\pi R^2 \sigma_0. \end{aligned}$$

6. Use "horizontal axis" and "vertical axis" rather than "x-axis" and "y-axis" if the variables are anything other than x and y.