Economics 312 Daily Problem #1

This property of summations is frequently useful in statistics and econometrics, and demonstrating it will allow you to review elements of algebra that we will use in class:

Show that
$$\sum_{i=1}^{n} (x_i - \overline{x})^2 = \sum_{i=1}^{n} (x_i)^2 - n\overline{x}^2$$
, where $\overline{x} \equiv \frac{\sum_{i=1}^{n} x_i}{n}$.