Ch 30 Statistics (C)

Averages: the mean, median and mode

$$\text{mean} = \overline{x} = \frac{\text{sum of the values}}{\text{total number of values}} = \frac{\Sigma_{i=1}^{n} x_i}{n}$$

The **median** of a set of numbers is found by listing the numbers in ascending order and then selecting the value that lies halfway along the list.

The **mode** of a set of values is that value that occurs most often.

The variance and standard deviation

When calculating variance/standard deviation with group/class data, remember to use midpoint value instead of the original values for x_i.

$$\text{variance} = \frac{\Sigma_{i=1}^{n} (x_i - \overline{x})^2}{n}$$

$$\text{standard deviation} = \sqrt{\frac{\Sigma_{i=1}^{n} (x_i - \overline{x})^2}{n}}$$