Physicists have determined that the only thing that affects the swing of a pendulum is the length of the cord according to the following equation:

$$T = 2\pi \sqrt{l/g}$$

where:

T=period of oscillation

l=length of pendulum

g=acceleration due to gravity on Earth

$g=9.8\ m/s^2$

Using the data collected for length from the class groups, determine the % Difference.

$$\%\ \text{Diff.} = \frac{\text{Maximum-Minimum}}{\text{Average}} \times 100\%$$

Percent deviation is used to determine how much different your values are from an excepted value

$$\%\ \text{Dev.} = \left| \frac{\text{Expt'l - Theoretical}}{\text{Theoretical}} \right| \times 100\%$$