

Physics 241 Lab 00

Revised Fall 2024

In today's lab we are going to do very simple things that you will need to learn for writing future lab reports.

You have at your work station a circular object and a metal ruler. I want you to make a measurement of the diameter and the circumference of the object in cm and write the results on the chart on the board. After everyone has completed these two measurements, I want you to look at the spreadsheet helper that is accompanying this lab. Make sure you delete my existing data in the spreadsheet helper.

I want you to make a graph of this data with diameter on the x-axis and circumference on the y-axis. In all my spreadsheet helpers, green cells are cells to make entries in. Orange cells are calculated values; don't change these or paste values in them. You should then see the graph and the slope of the graph gives you the measured ratio between the circumference and the diameter of circular objects. Mathematically this is expected to be π which is approximately 3.14. The spreadsheet will calculate the % error.

We will use this today as the basis for creating the lab report lab00 so you can see the important details about lab report preparation and submission that you will need to know for future labs.