Hello World Program

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1 Problem 0

Hello World!

2 Problem 1

1. 5000 $\pm 5\Omega$
2. 1000 $\pm 1\Omega$
3. 3000 $\pm 3\Omega$
4. 10000 $\pm 10\Omega$
5. 100000 $\pm 100\Omega$

3 Problem 2

Euler's formula, given by $e^{ix} = cosx + isinx$, establishes the fundamental relationship between the trigonometric functions and the complex exponential function.

4 Problem 3

$$\int_{T_0}^{T_1} x^2 dx = \frac{1}{3}(T_1^3 - T_0^3)$$

5 Problem 4

$$\delta x = \sqrt{\frac{1}{N(N-1)} \sum_{n=1}^{N} (x_i - \bar{x})^2}$$

6 Problem 5

DMM Uncertainties	
DMM Model	MASTECH MS8268
Resistance:	δ R = (1.2 % of rdg + 2 digits)
DC Voltage:	δV = (0.7 % of rdg + 2 digits)
DC Voltage:	δ I = (1.2 % of rdg + 3 digits)

7 Problem 6

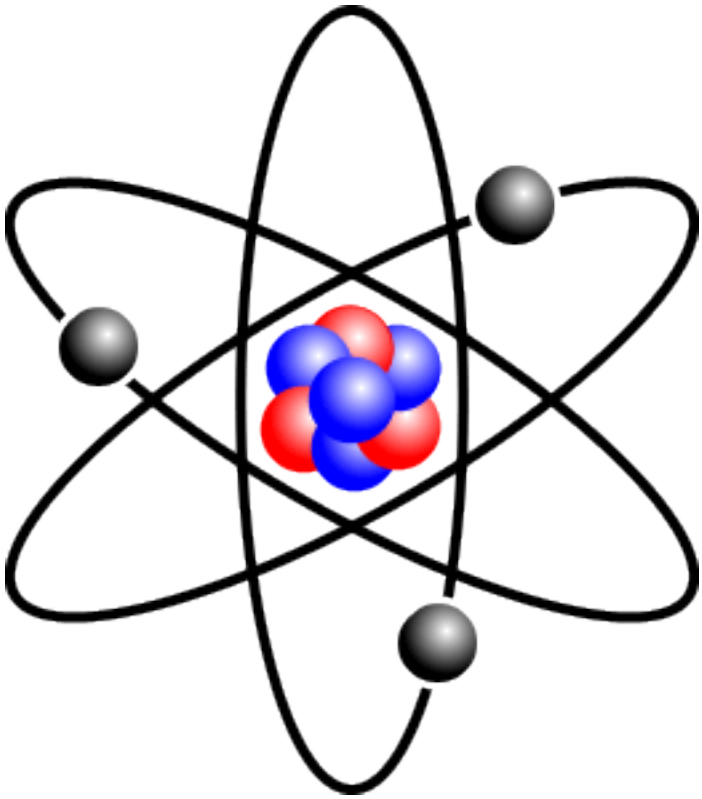

Figure 1: **Figure 3.2:** A picture of an atom.