

Report No. (1)

DETERMINATION OF THE DENSITY USING DIFFERENT METHODS

Student Names: Section No:

The objective of the experiment:

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First method:

If you have a cylindrical object, the weight of the mass of the body was taken and the dimensions were taken by the ruler. The measurements were as follows:

L (cm)	r (cm)	m (g)
3.8	1.5	14.007

1. Calculate the volume of your specimen (massive cylinder).

2. Calculate the density of your specimen (massive cylinder).

3. Tabulate your errors of measurements:

ΔL (cm)	Δr (cm)	Δm (g)

4. Calculate the error in the density ($\Delta \text{density}$), and its accuracy.

a. $\Delta \text{density}$:

b. The accurate of density

Second method:

1. Report your measurements as follows:

V_1 (cm ³)	V_2 (cm ³)	m (g)

2. Calculate the volume of your specimen:

3. Calculate the density of specimen:

4. Tabulate the values of experimental errors:

ΔV_1 (cm ³)	ΔV_2 (cm ³)	Δm (g)

5. Calculate the error in the density (Δ density), and its accuracy:

a. Δ density :

b. The accurate of density