

LAB EXPERIMENT

RELATION BETWEEN THE AREA OF A BEAKER AND THE LEVEL OF THE LIQUID IT CONTAINS

LAB REPORT

STUDENTS' NAMES

Write your names here

PURPOSE

and the level | inversely proportional. | (algebraically and graphically) |
are | Verifying | that the area of a beaker | of the water it contains

MATERIALS AND INSTRUMENTS

Task.

Make a list with all materials. Do not forget to mention sensitivity and range of the measuring instruments.

-
- (sensitivity: _____ ; range: _____)
- (sensitivity: _____ ; range: _____)

PICTURES OF EXPERIMENTAL MATERIAL

Task.

Take a picture of the experimental material and upload it onto this lab report.

EXPERIMENTAL PROCEDURE

Task

Make a list with all the steps that should be taken.

- _____
- _____
- _____
- _____

COLLECTED DATA AND RESULTS

Task.

Fill in the following tables with the data you collected.

BEAKER	Water volume V [cm ³]	Diameter of the beaker d [cm]	Area of the beaker $S = \frac{\pi d^2}{4}$ [cm ²]	Water level h [cm]	Product $S \cdot h$ []	Average product \bar{k} []	Error on the average product $\varepsilon_{\bar{k}}^*$ []
1							
2							
3							
4							
5							

*The error has been calculated using the.....

GRAPH

Task. Open an XLS file to build a graph. Then copy and paste your graph here.

CONCLUSIONS

Task. Write here what you understood.

To complete the conclusions, you can answer these questions:

- What do you notice from the table?

According to the table, do you think that there is some proportionality between the area of the beaker and the water level?

What is the proportionality constant? Is it consistent with what you expected?

- What do you notice from the graph?

According to the graph, do you think that there is some proportionality between the area of the beaker and the water level?