

LAB EXPERIMENT

RELATION BETWEEN THE PERIMETER OF A CIRCLE AND ITS DIAMETER

LAB REPORT

STUDENTS' NAMES

Write your names here

PURPOSE

Task. Reorder the sentence

and its diameter | directly proportional. | (algebraically and graphically) |
are | Verifying | that the perimeter of a circle |

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.

OBJECT	Perimeter c []	Diameter d []	Ratio $\frac{c}{d}$	Average ratio \bar{k}	Error on the average ratio $\varepsilon_{\bar{k}}^*$
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 perimeter and the diameter of a circle?

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 perimeter and the diameter of a circle?

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