

Paper Homework No. 01 (Spring 2018)

PHYS 205A: University Physics

Due date: Monday, 2018 Jan 22, 12.00pm, in class

(Name)

(Signature)

Instructions

1. Your submission should include only this page. Other forms of submissions will not be accepted. Please print this page, and write your solution on the back side.
2. Show your thought process in detail and organize it clearly.
3. Make sure your answer has the correct units and the right number of significant digits.

Question

You come across the following expression

$$K = \pi(r_1 + r_2)\sqrt{h^2 + (r_2 - r_1)^2}, \quad (1)$$

where the variables r_1 and r_2 represent distances. You do not know the definitions of the variables h and K a priori. Using dimensional analysis deduce if the expression K could represent a perimeter, a area, or a volume.

Student Submission