

task_ic9pioiu0notvwfp_with_calculation

Student Group

First Name	Surname	Matrikel Nr.

Table of Contents

Exercise E2 Electrostatics II (written test, approx. 10 % of a 120-minute written test, SS2022)	2
---	---

electrostatic, electric field strength, exam ee2 SS2022

Exercise E2 Electrostatics II

(written test, approx. 10 % of a 120-minute written test, SS2022)

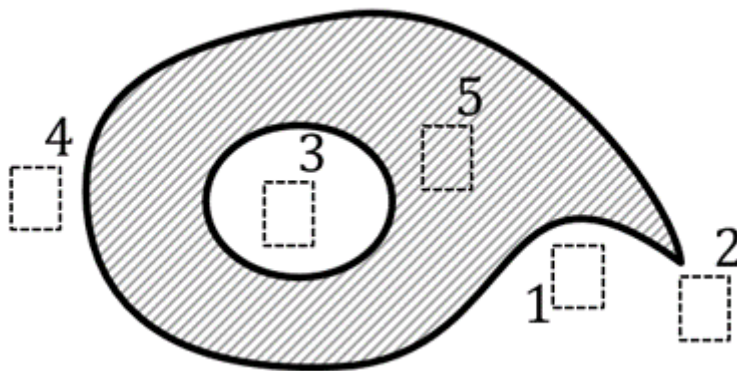
The figure below shows an arrangement of ideal metallic conductors (gray hatched) charged up to $q = +1 \text{ nC}$.

In white a dielectric (e.g. vacuum) is shown.

Several designated areas are shown by dashed frames and numbers x , which are partly inside the object.

Arrange the designated areas clearly according to ascending field strengths $|\vec{E}_x|$ (absolute magnitude)!

Indicate also, if designated areas have quantitatively the same field strength.



Result

$$|E_3| = |E_5| = 0 < |E_1| < |E_4| < |E_2|$$

From:

<https://mexle.te.hs-heilbronn.de/> - MEXLE Wiki

Permanent link:

https://mexle.te.hs-heilbronn.de/electrical_engineering_and_electronics/task_ic9pioiu0notvwfp_with_calculation

Last update: 2024/07/04 23:47

