Name:

Date:

Tools: one 9 pcs Set / class

534 - Upside down Blocks in GeoGebra





MATHS / TRANSFORMATIONS



Erasmus+

STUDENT Logifaces

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DESCRIPTION

LEVEL 1

Students start with the GeoGebra model of the block 123 (see exercises <u>526 - Calculate the Coordinates</u> and <u>527 - Coordinates in GeoGebra</u>). The task is to find transformations to move the block in such a way that the top face lies in the xy-plane, one edge lies on the x-axis, one vertex is in the origin and the whole block is contained in the upper half-space.

HINTS

- Recommended steps of transformations: reflection, rotation around a line, translation
- It is recommended to start with the model where the vertical edge of length 1 has coordinates x=0, y=0, and the vertical edge of height 3 has coordinates x=4, y=0.

LEVEL 2

Students calculate the exact values of the coordinates of the block placed as in the Level 1 exercise. They can use the transformations to help the calculations.

SOLUTION(S)