

Name and surname class.....

WORKSHEET 1

Activity 1.

Draw a graph showing my distance from the wall, taking into account all stages of my movement:

I begin by standing still for a short moment.

Then I walk toward the wall at a steady, moderate pace, and after reaching a point near the wall, I walk away from it at the same pace.

Again, I stop and stand still for a moment.

Next, I walk toward the wall at a steady, fast pace, and then walk away from the wall at the same fast pace.

I pause and stand still again.

Finally, I walk toward the wall at a steady, slow pace, and then walk away from it at the same slow pace.

At the end, I stand still for a moment once more.

Your graph – first attempt:



This material is provided by the [EMPE Team](#), responsible institution: University of the National Education Commission in Krakow. Unless otherwise noted, this work and its contents are licensed under This work is licensed under a Creative Commons Licence [CC BY-NC-SA 4.0](#). Excluded are funding logos and CC icons / module icons.

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Redraw the shape of the graph made by the sensor:



Write down what you notice.

.....

.....

Graph analysis:

Mark the successive stages of the movements using three different colours:

- we are standing, so the distance from the wall is the same,
- the distance from the wall is decreasing,
- the distance from the wall is increasing.



This material is provided by the [EMPE Team](#), responsible institution: University of the National Education Commission in Krakow.

Unless otherwise noted, this work and its contents are licensed under This work is licensed under a Creative Commons Licence [CC BY-NC-SA 4.0](#). Excluded are funding logos and CC icons / module icons.

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Activity 2. Slowly – quickly TOWARDS the wall.

Two people walk TOWARDS the wall at the same pace, but one slowly and the other quickly. Draw what the graphs will look like.

Use two different colours to draw both graphs.

Person 1 walks towards the wall slowly – line named s

Person 2 walks towards the wall quickly – line named q



In your own words, explain how you can tell from the graph when the movement towards the wall was slow and when it was fast.

.....

.....

.....

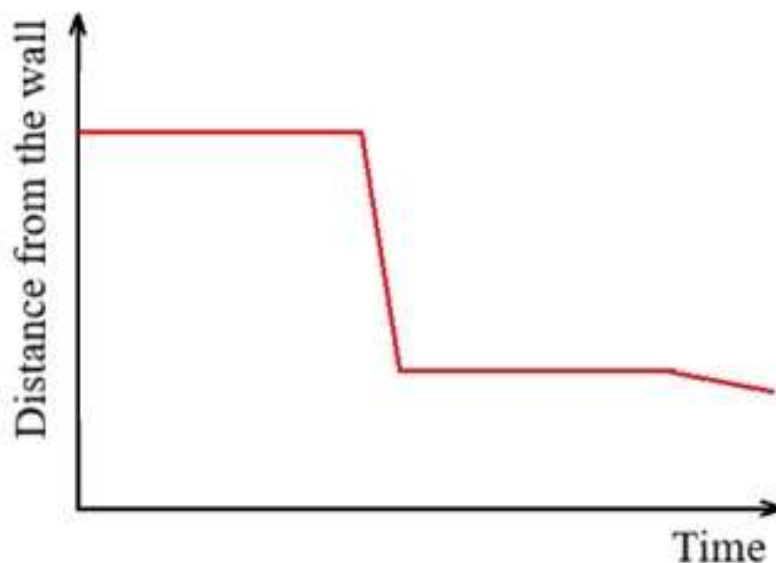


This material is provided by the [EMPE Team](#), responsible institution: University of the National Education Commission in Krakow. Unless otherwise noted, this work and its contents are licensed under This work is licensed under a Creative Commons Licence [CC BY-NC-SA 4.0](#). Excluded are funding logos and CC icons / module icons.

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Activity 3.

The graph shows what the other movement looked like:



How many parts does the graph consist of?

Next to each line, write a number that indicates the next part of the movement.

Describe this movement.

First, write down the number representing the part of the movement you made and then describe it using the glossary below:

.....

.....

.....

.....

GLOSSARY

the distance does not change

the distance is increasing

I am walking towards the wall

the distance is decreasing

I am moving away from the wall

I am not moving

I am walking slowly

I am walking parallel to the wall

I am walking quickly



This material is provided by the [EMPE Team](#), responsible institution: University of the National Education Commission in Krakow.

Unless otherwise noted, this work and its contents are licensed under This work is licensed under a Creative Commons Licence [CC BY-NC-SA 4.0](#). Excluded are funding logos and CC icons / module icons.

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.