

Name: _____ Period: _____ Date: _____

GRAPH YOUR MOTION!

This is a group task. Make sure that all members of your group understand and can explain.

New Vocabulary

Rate of change
Positive rate of change
Negative rate of change
No rate of change
Slope

Old Vocabulary

Increase
Decrease
Steep/Steeper
Speed
Y-Intercept

1. Walk away from the CBR at a constant rate.

a. Sketch your graph here. Be sure to scale your axes.



b. How far did you walk?

c. How much time did it take?

d. What was your rate of change?

2. Walk toward the CBR at a constant rate.

a. Sketch your graph here. Be sure to scale your axes.



b. How far did you walk?

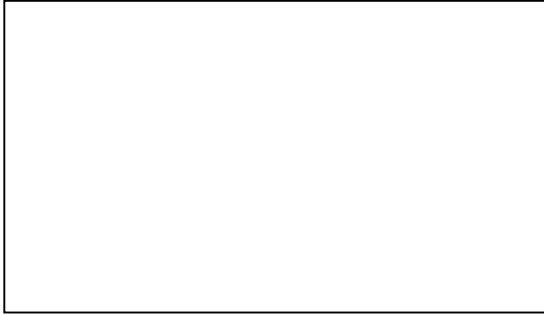
c. How much time did it take?

d. What was your rate of change?

*****When you are done with the first graph, call a teacher over for a group quiz. Be sure you know how to explain your answers to #1. _____**

3. Walk away from the CBR at a constant rate starting at the 1 m mark for 3 sec., then walk toward the CBR at the same constant rate.

a. Sketch your graph here. Be sure to scale your axes.

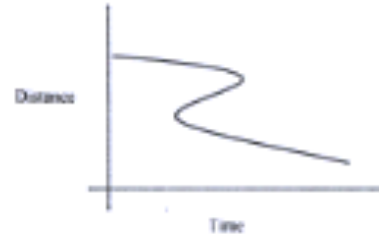


b. How far did you walk?

c. How much time did it take?

d. What was your rate of change?

4. Look at the graph below. Do you think that it is possible for a person to walk this? Explain why or why not.



Questions:

1. How do you have to walk to create a line parallel to the x-axis? Is it possible? Why or why not?

2. How do you have to walk to create a line parallel to the y-axis? Is it possible? Why or why not?

*****Challenge:*****

Match this graph using the CBR! When you are done, explain how you walked.

