Making Time vs. Distance Graphs

For each scenario, draw or write a prediction of what the graph will look like based on the person’s motion. After seeing the result, draw the actual results and compare your findings (all plotted in distance vs.time).

1. Move so that a straight line that increases from left to rights is created:
   1. Sketch 1st Attempt: b. Sketch 2nd Attempt:

How can you change the rate of increase of this line?

1. Move so that a graph with 3 distinct linear segments, one of which is horizontal, is created:
   1. Sketch 1st Attempt: b. Sketch 2nd Attempt:
2. Move so that a straight line that decreases from left to right is created:
   1. Sketch 1st Attempt: b. Sketch 2nd Attempt:
3. Move so that a non-linear graph is created:
   1. Sketch 1st Attempt: b. Sketch 2nd Attempt:

What causes it to be non-linear?

1. Move so that a graph that gets continuously steeper and steeper is created:
   1. Sketch 1st Attempt: b. Sketch 2nd Attempt:

Summarize your findings.

1. What action was taken to create a graph with a straight line?
2. What happened to the graph when someone stood still?
3. Ho w would you create a graph that both increases and decreases?
4. What does a decreasing line mean in regards to a person’s distance over time?