Acting Out Motion Scenarios and Graphs

1. Students will work in groups
2. The teacher will identify a space to allow students to move freely forward and back along a numbered line placed on the floor. (This could be a line on a tiled floor.)
3. Before starting, students should make predictions, explaining what they think will happen, how they will move, and why.
4. One student will then "**Act Out"** the scenario motion on the marked floor. Students should rotate jobs, allowing each student to 'feel' the motion.
5. Another member of the group is the time keeper, snapping the cadence at 1 second intervals of time
6. The rest of the students should graph each motion scenario as Distance vs. Time on the provided graphs
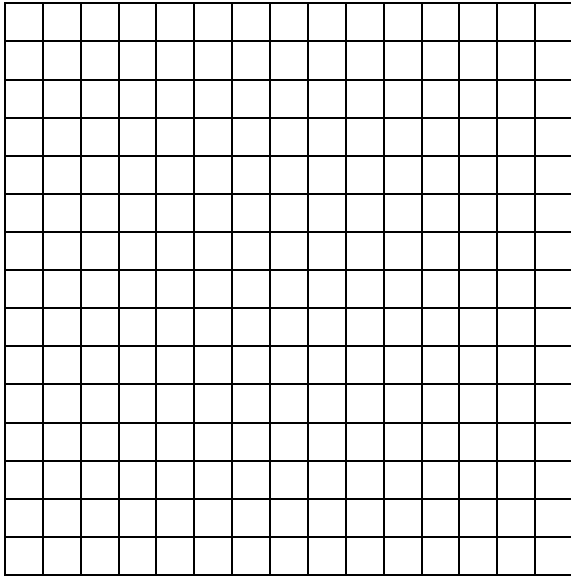
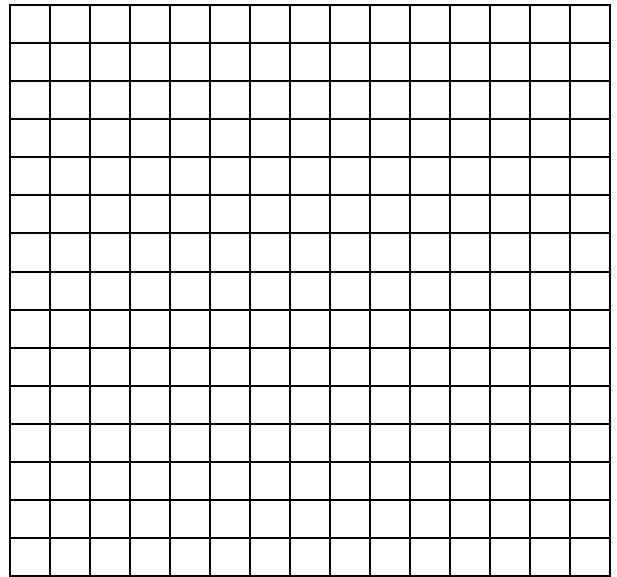| Scenario #1	Scenario #2	Scenario #3	Scenario #4
From 0, walk forward with a steady pace for 7 seconds.	From 10, Walk backward with a steady pace for 5 seconds	From 0, Walk steadily forward for 3 seconds, stop for 3 seconds, and walk forward very quickly for 3 seconds	From 0, move at an increasing rate of speed away from the origin for 8 seconds.

Answers:
1. Make predictions, explaining what you think will happen during each scenario, how you will move
2. Draw a time / distance table for each scenario
3. Graph a distance vs. time data table for each scenario

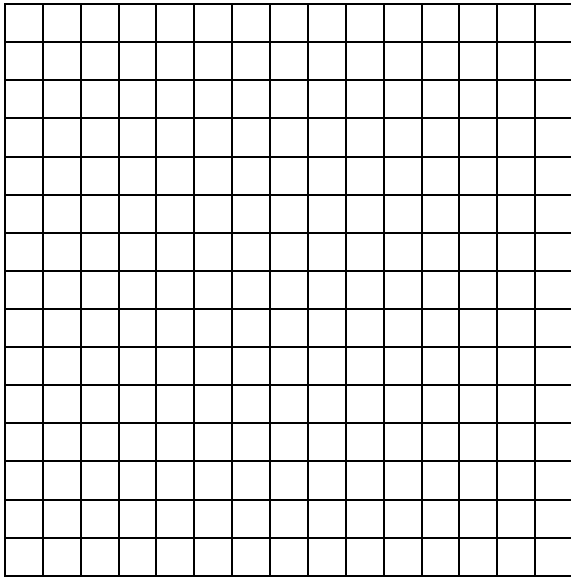**3. Graph the scenarios in the following grids**

Graph Scenario #_____

Graph Scenario #_____

Graph Scenario #_____

Graph Scenario #_____