

Graph Matching

PRELIMINARY QUESTIONS

BEFORE beginning the graph matching, answer the following questions with your lab group.

1. Use a coordinate system with the origin at far left and positive distances increasing to the right. Sketch a predicted distance vs. time graph for each of the following situations:
 - a. An object at rest
 - b. An object moving in the positive direction with a constant speed
 - c. An object moving in the negative direction with a constant speed
 - d. An object that is accelerating in the positive direction, starting from rest
2. Get your predicted sketches approved before you match them.
3. Try to match the shape of the distance vs. time graphs that you predicted by walking in front of the Motion Detector. Make any corrections in a different color.
3. Sketch the velocity vs. time graph for each of the situations described above. Get your predicted sketches approved.

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