Worksheet 1.1

For all diagrams, each point is taken at 1 second intervals. The first point is measured at t = 1 s. The object begins its journey at the black block closest to the first time point.

1.

2.



- a) What is the position of the object at t = 3s?
- b) What is the distance that the object traveled for the entire trip?
- c) How much time did the trip take?
- d) What is the object's average velocity?
- e) How much time does it take for the object to travel a distance of 2 m?
- f) At what clock reading will the object have a displacement of 10 m?



- a) What is the position of the object at t = 5 s?
- b) What is the displacement of the object for the entire trip?
- c) What is the object's displacement from a clock reading of t = 3 s to t = 5 s?
- d) How long (time) was the object's trip?
- e) Describe the object's motion (i.e. does it speed up, slow down, move at a constant speed?)

3. In the diagram below, the object moves in one direction and then makes a U-turn and goes back in the opposite direction. Points below the number line indicate time points taken after the U-turn.



- a) What is the total distance traveled by the object?
- b) What is the object's total displacement?

c) What is the objects average velocity for the whole trip?