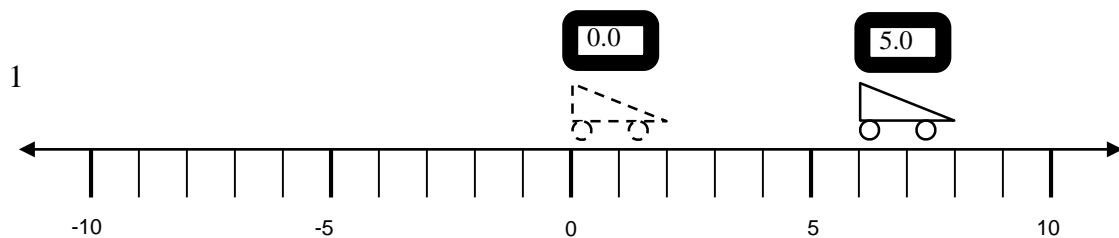
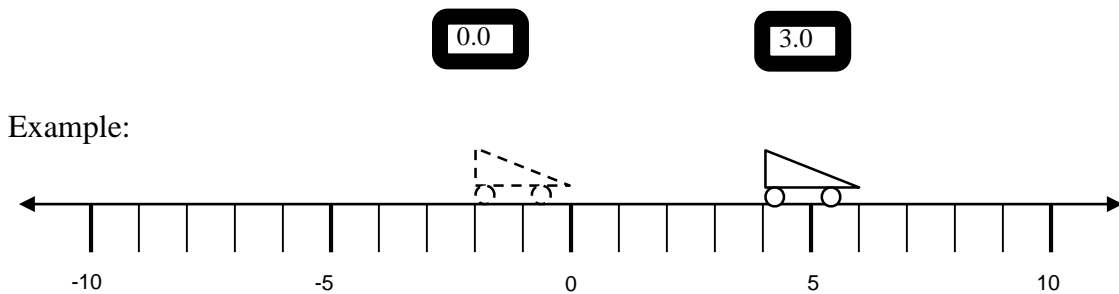


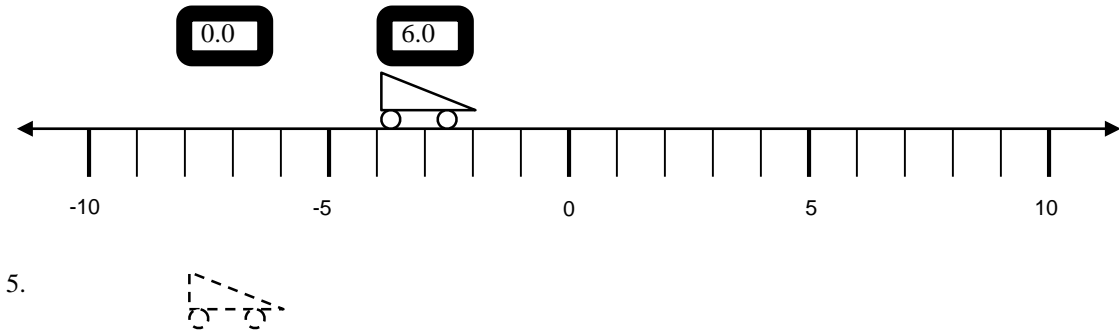
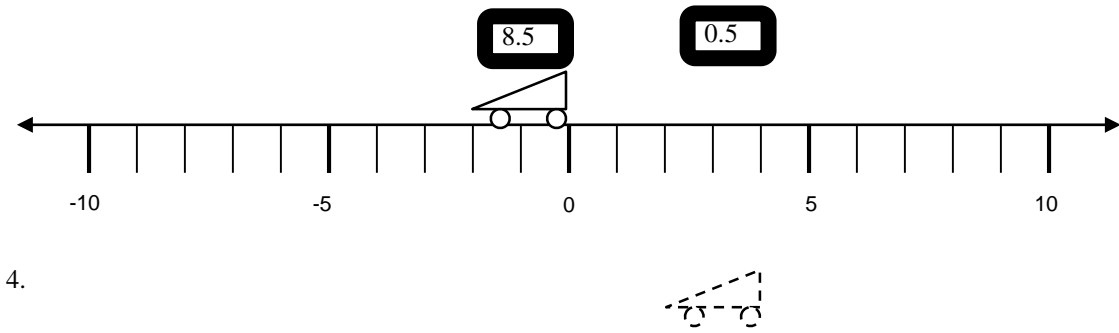
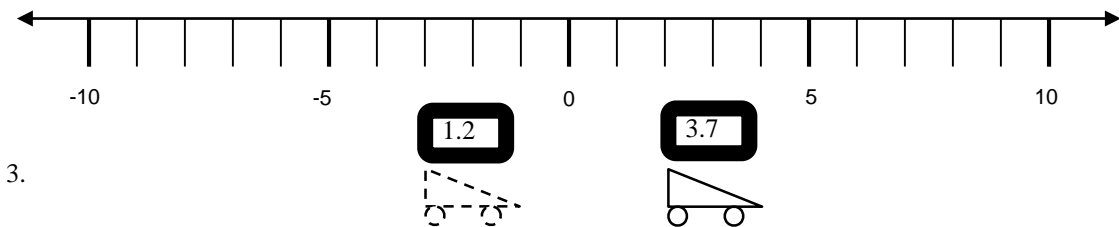
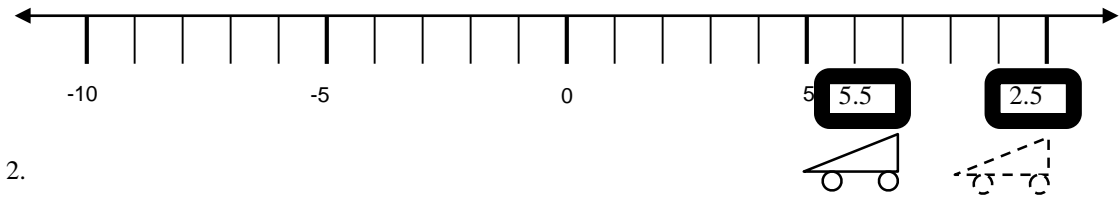
Unit 2: Describing Motion

Exercise 3 – Calculating Speed and Velocity

On each number line, you will see two cars: an initial car (dashed line) and a final car (solid line). Above each car is a stopwatch. Assume that the position scales are calibrated in meters and the stopwatches are calibrated in seconds.

- Record the initial and final positions of each car. Positions are measured in meters.
- Calculate the change in position of the car. Show your work.
- Do the two above steps for the clock readings. Clock readings are measured in seconds.
- Calculate the average velocity for each trip, show your work
- Show all of the steps shown in the example in each of the following problems.





For problems 6 and 7, the car travels from point A to point B and then turns around to travel to point C. For each one:

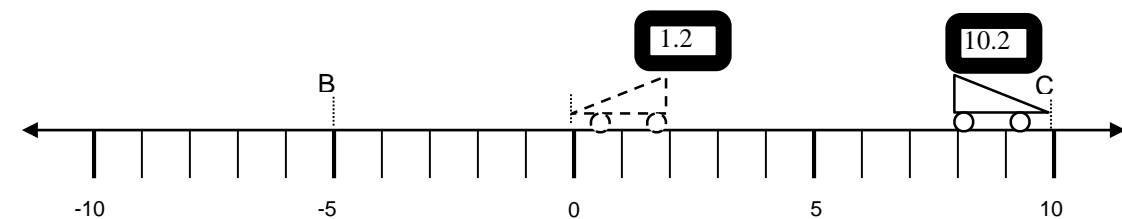
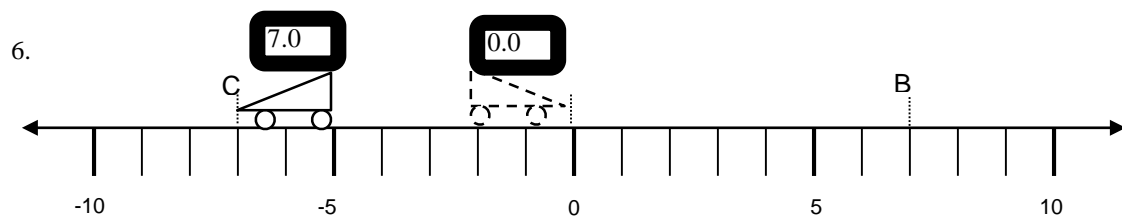
Calculate the displacement for the entire trip from A to C. Show your work.

Calculate the time for the trip from A to C. Show your work.

Calculate the average velocity for the trip from A to C. Show your work.

Calculate the total distance traveled for the entire trip from A to C. Show your work.

Calculate the average speed for the trip from A to C. Show your work.



7.

8. Compare the differences between speed and velocity.