Accelerated Motion Problem 5

Step 1: Below is a picture of a bobsledder after they cross the finish line. They are moving at top speed at the moment they cross the finish line and begin to slow down with a constant acceleration. In the picture below put the distance they covered while stopping, the time it took them to stop and the final velocity after coming to rest.



Step 2: Using your values for distance and time, find the average speed of the sled while stopping. Show your work neatly in the space below.

Step 3: Using the average speed you just calculated and the fact that the sled ends at rest, find the speed right as it was passing the finish line.

Step 4: Finally, find the acceleration of the sled while stopping. This should come out as a negative number. Enter your answers into your program to check that you did everything properly