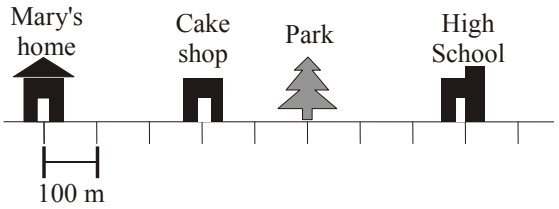
There's something about Mary.

Yesterday, Mary exited her home towards the High School at 8:00 a.m. At 8:05 she stopped at the cake shop to buy her breakfast. It was crowded, so she had to stay there for 5 minutes. As she left the shop, she remembered she hadn't got the homework of Physics. She forgot it in her room. The heartless Physics teacher would give her a bad mark. So, she had to return home (5 min). Fortunately, her mother was at the door with the notebook in her hands and a very angry face: "What are you thinking…?" Mary took the notebook and ran towards the high school, but, 5 minutes later, when she was passing the park, she met Susie, and they walked slowly while talking. Finally, Mary arrived to the High School at 8:30. She knocked at the classroom door and opened with a big sweet smile on her face: "Sorry, sir, I'm late, can I come in?".
(crowded = full of people)



t (min)							
x (m)							

a) Make a data table (position vs time). (Take the marks every 5 minutes. The time starts at 8:00. Remember you have to choose a reference system)

b) Plot the graph

c) Calculate the displacement from 8:10 to 8:15.

d) Calculate the total displacement of Mary's movement.