

Problem 1 part 7

The mean squared displacement at any instant can be approximated to the time step at that instant (By observation we see that the graph for mean squared displacement is roughly $y = x$)

Therefore,

$$\langle x_i^2(t) \rangle = t$$

$$\text{Since } \langle x_i^2(t) \rangle = 2Dt$$

$$D = \frac{1}{2}$$