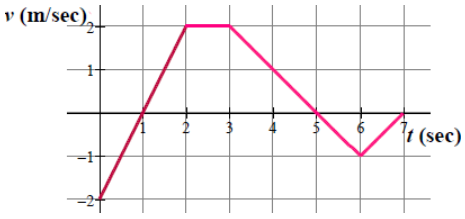

The graph of a particle moving on the y-axis is given. The particle starts at s(0) = 3 when t = 0.

a) Find the displacement of the particle in the interval [0, 7].

b) Find the position of the particle at t = 7.

c) Find the total distance the particle travels in the interval [0, 7].

d) Find the average velocity of the particle in the interval [0, 7].

2) Given that $v(t) = t^2 - 3t + 2$ for [0, 4], and s(0) = 5

a) Determine when the particle is moving to the right, to the left, and stopped.

c) Find the particles position at time t = 4.

d) Find the total distance traveled by the particle.