The motion of a particle along a line is described by the velocity function

$$v(t) = t^2 - 5t + 6 \quad s(0)=4$$

a) Find its position at time t =2
b) Find its acceleration at time t.
c) For which times t is the particle at rest?
d) For which times t is the particle moving to the right?
e) For which times t is the particle moving to the left?
f) Find the distance traveled by the particle from t = 0 to t = 3.
g) Find the displacement of the particle between time t = 0 and t = 3.