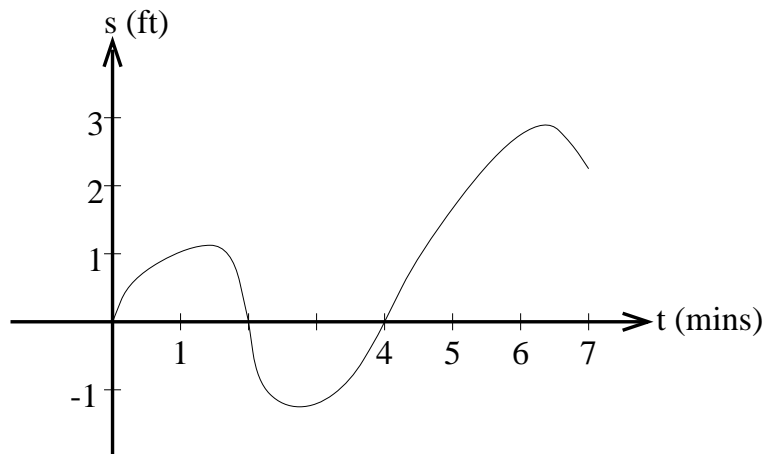


10. (14 pts.) A particle is moving along a straight line. Its distance,  $s$ , measured in feet to the right of a fixed point at time  $t$  minutes, is given by the graph in the figure.



- (a) Over which time interval(s) is the particle moving to the right? Explain.
- (b) Over which time interval(s) does the particle have negative acceleration? Explain.
- (c) At approximately which time does the particle have the highest speed? (**Recall that speed is the magnitude of the velocity.**) Explain your answer.
- (d) On the axes above, sketch a graph of the velocity function.