## Question 8

Determine the signs (positive or negative) of the position, velocity, and acceleration for the particle in Figure Q1.8.


FIGURE Q1.8

## Solution

The positive $y$-direction is to the top. Since the object is above the origin, the position is positive. Since the object is moving to the top, the velocity is positive. Since the object is speeding up to the top, the acceleration is positive.

