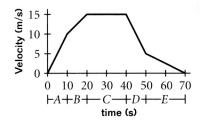
**3.** Below is the velocity-time graph of an object moving along a straight path. Use the information in the graph to fill in the table below.



For each of the lettered intervals below, indicate the motion of the object (whether it is speeding up, slowing down, or at rest), the direction of the velocity (+, -, or 0), and the direction of the acceleration (+, -, or 0).

Time interval	Motion	v	a
A			
В	-		
C			
D			
Е			

- **4.** A ball is thrown upward with an initial velocity of 9.8 m/s from the top of a building.
  - **a.** Fill in the table below showing the ball's position, velocity, and acceleration at the end of each of the first 4 s of motion.

Time (s)	Position (m)	Velocity (m/s)	Acceleration (m/s <sup>2</sup> )
1			
2			
3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
4			

- **b.** In which second does the ball reach the top of its flight?
- **c.** In which second does the ball reach the level of the roof, on the way down?