9 A particle travels in a straight line. As it passes through a fixed point O, the particle is travelling at a velocity of $3\,\text{ms}^{-1}$. The particle continues at this velocity for 60 seconds then decelerates at a constant rate for 15 seconds to a velocity of $1.6\,\text{ms}^{-1}$. The particle then decelerates again at a constant rate for 5 seconds to reach point A, where it stops.

(a) Sketch the velocity-time graph for this journey on the axes below. [3]



(b) Find the distance between O and A. [3]

(c) Find the deceleration in the last 5 seconds. [1]