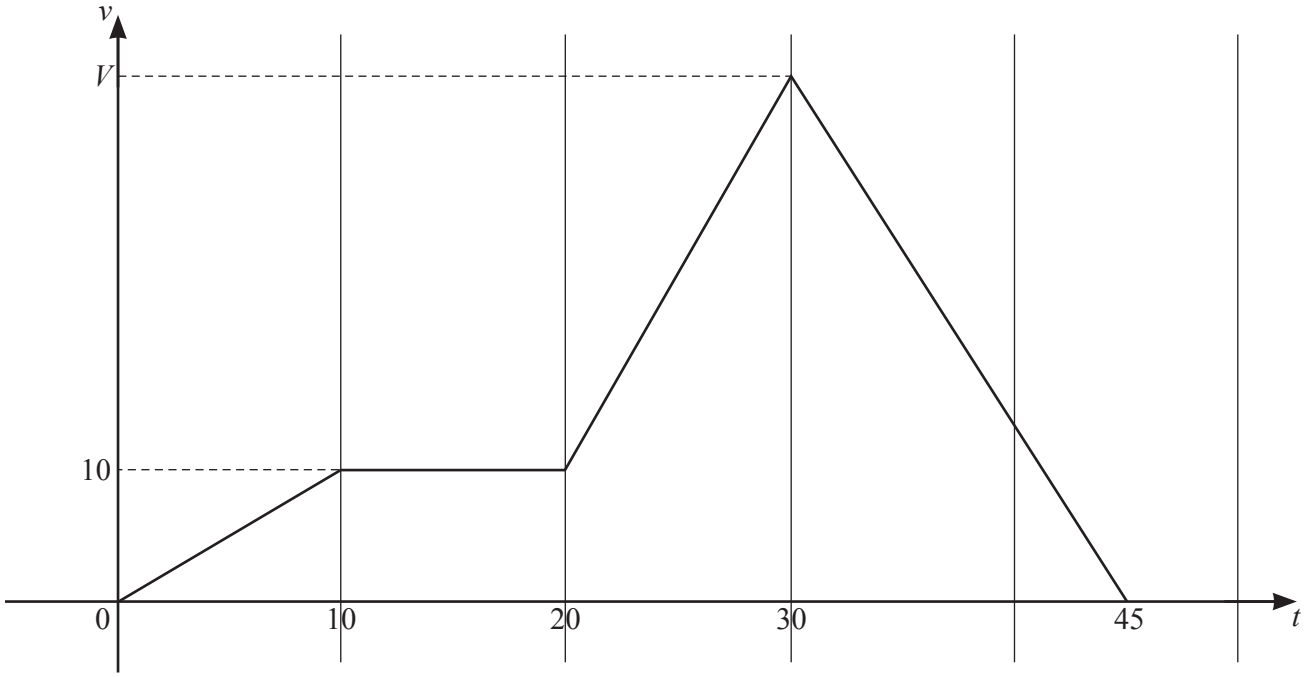
4



The diagram shows the velocity–time graph for a particle travelling in a straight line with velocity, $v\,\text{ms}^{-1}$, at time t seconds. When $t = 30$ the velocity of the particle is $V\,\text{ms}^{-1}$. The particle travels 800 metres in 45 seconds.

(a) Find the value of V. [2]

(b) Find the acceleration of the particle when $t = 35$. [2]