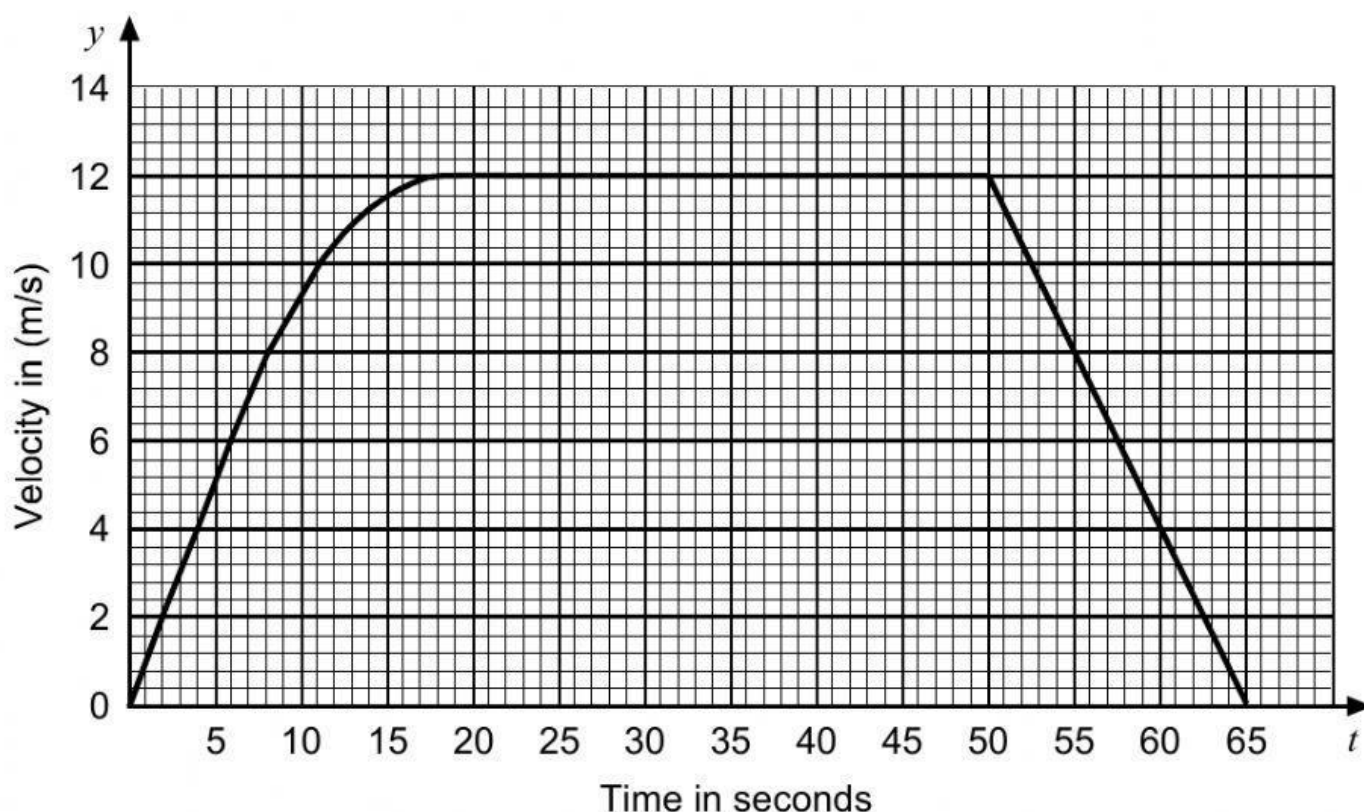1.　A car travels between two sets of traffic lights.
The diagram represents the velocity/time graph of the car.

The car leaves the first set of traffic lights.
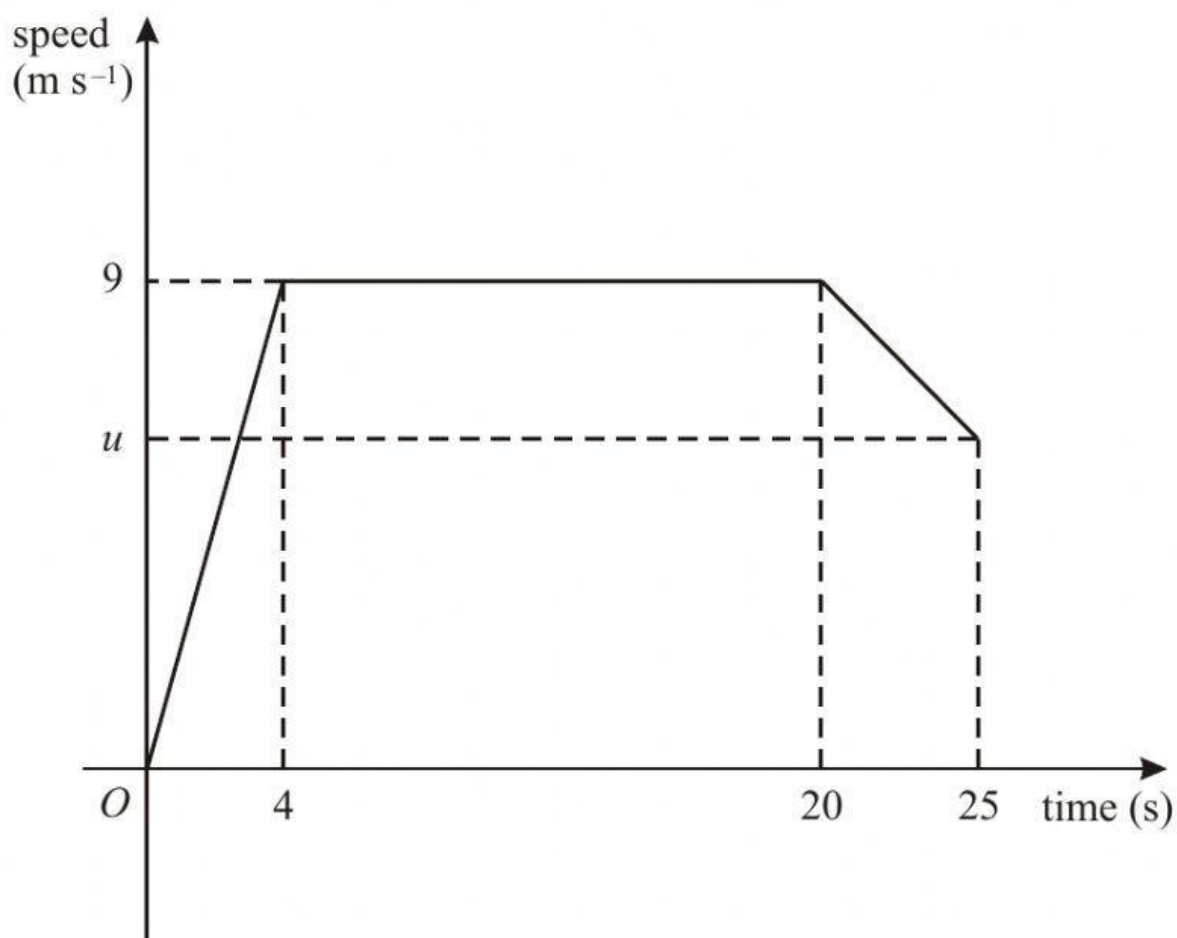
(a) Use the graph to find the velocity of the car after 15 seconds.

.... (1)

(b) Calculate an estimate for the acceleration of the car, in m/s^2, after 10 seconds.

.... (2)

3. A sprinter runs a race of 200 m.
Her total time for running the race is 25 s.
Below is a sketch of the speed-time graph for the motion of the sprinter.

Calculate:

a) The acceleration in the first 4 seconds of the race

.... (2)

b) The distance covered by the sprinter in the first 20 seconds of the race

.... (2)

c) The value of u

.... (3)