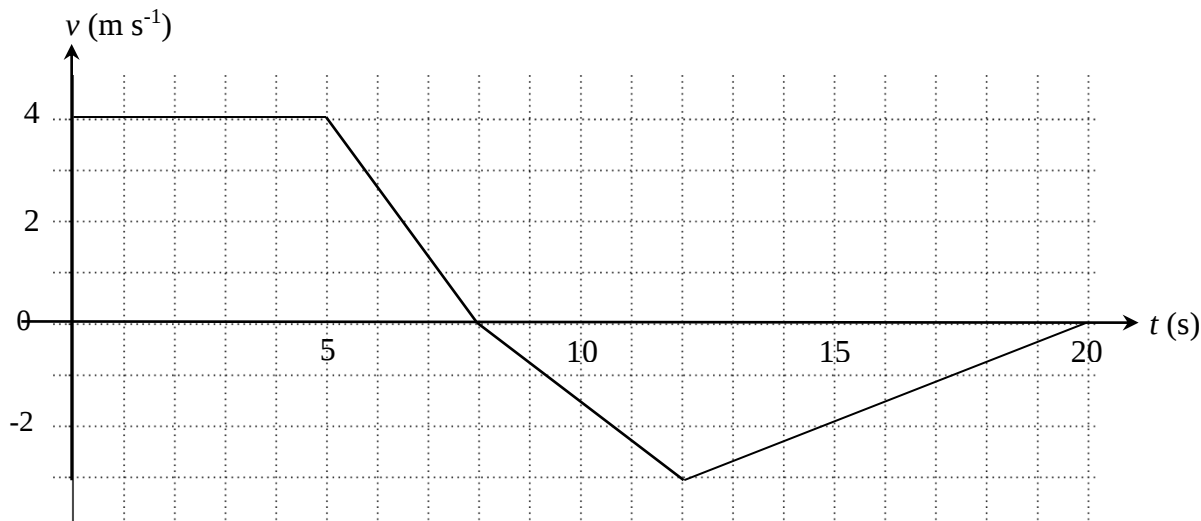


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The diagram below shows the velocity-time graph of a car moving along a straight road, where $v \text{ m s}^{-1}$ is the velocity of the car at time $t \text{ s}$ after it passes through the point A.



- (a) Calculate the acceleration of the car at $t = 6$. [2]
- (b) Jasmit says “The distance travelled by the car during the first 20 seconds of the car’s motion is more than five times its displacement from A after the first 20 seconds of the car’s motion”. [3]

Give evidence to support Jasmit’s statement.