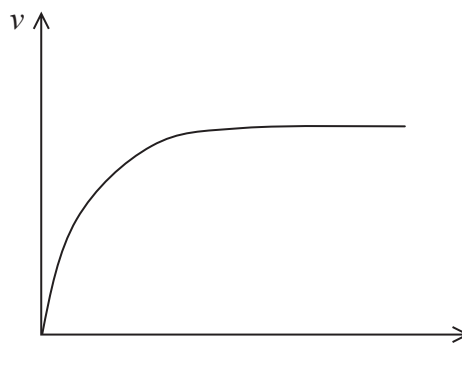


- 11** A sports class is studying cycling. They produce a video of a cyclist on a horizontal lawn. The cyclist starts from rest. They produce a sketch graph of the velocity v of the cyclist against time t .



- (a) Explain the shape of this graph and include a consideration of force as part of your answer. (3)

- (b) A student makes the following statement.

The work done by the cyclist is converted into the kinetic energy of the cyclist and bicycle.

Criticise this statement.

(3)