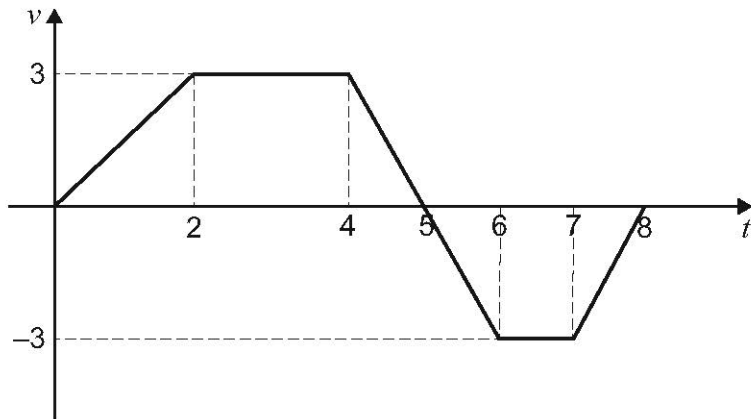


15

A graph indicating how the velocity, $v \text{ m s}^{-1}$, of a particle changes with respect to time, t seconds, is shown below.



15 (a) Find the total distance travelled by the particle over the 8 second period shown. [3 marks]

15 (b) A student claims that
 “The displacement of the particle is less than the distance travelled.”

State the range of values of t for which this claim is true.

[1 mark]