

- 3** A racing car accelerates uniformly through three gear changes with the following average speeds:

20 m s^{-1} for 2.0 s

40 m s^{-1} for 2.0 s

60 m s^{-1} for 6.0 s

What is the overall average speed of the car?

A 12 m s^{-1}

B 40 m s^{-1}

C 13.3 m s^{-1}

D 48 m s^{-1}