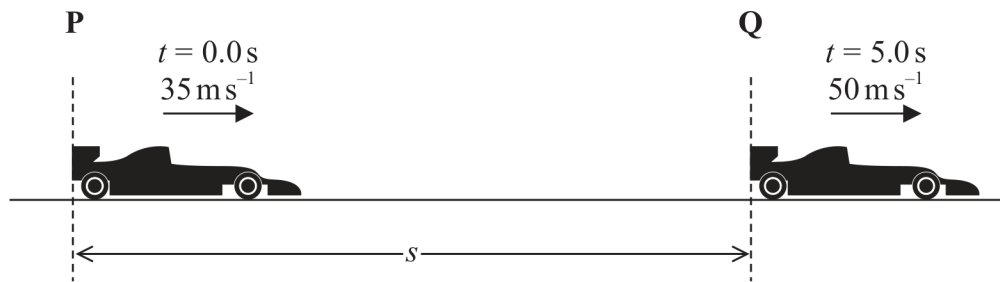**5** A racing car passes point P at a speed of $35 \, \text{m s}^{-1}$.

The car accelerates uniformly and after $5.0 \, \text{s}$ passes point Q at a speed of $50 \, \text{m s}^{-1}$, as shown.

Which of the following expressions gives the distance s, in metres, between the two points?

☒ **A** $\dfrac{50^2 - 35^2}{2 \times 5}$

☒ **B** $(35 \times 5) + (0.5 \times 9.81 \times 5^2)$

☒ **C** $0.5 \times (35 + 50) \times 5$

☒ **D** $35 + (9.81 \times 5)$

(Total for Question 5 = 1 mark)