Answer ALL questions.

**For questions 1–10, in Section A, select one answer from A to D and put a cross in the box ☒.
If you change your mind, put a line through the box ☒ and then
mark your new answer with a cross ☒.**

1   A car is moving towards a stop sign at a speed of $25\,\text{m s}^{-1}$. The driver applies the brakes $20\,\text{m}$ before the sign and decelerates uniformly to rest just before the sign.

Which of the following gives the magnitude of the car's deceleration in m s^{-2}?

☒   **A** $\dfrac{25}{40}$

☒   **B** $\dfrac{25}{20}$

☒   **C** $\dfrac{25^2}{40}$

☒   **D** $\dfrac{25^2}{20}$

(Total for Question 1 = 1 mark)