

- 3** A car is travelling at a speed of  $15 \text{ m s}^{-1}$  and can be brought to rest with a uniform deceleration in  $1.2 \text{ s}$  if the brakes are applied. The reaction time of the driver is  $0.10 \text{ s}$ .

What is the closest distance that the moving car can be to a stationary object if a collision is to be avoided?

- A** 9.0 m                      **B** 10.5 m                      **C** 12.0 m                      **D** 19.5 m