

- 8** On a particular railway, a train driver applies the brake of the train at a yellow signal, a distance of 1.0 km from a red signal, where the train stops.

The maximum deceleration of the train is  $0.20 \text{ m s}^{-2}$ .

Assuming uniform deceleration, what is the maximum safe speed of the train at the yellow signal?

- A**  $14 \text{ m s}^{-1}$       **B**  $20 \text{ m s}^{-1}$       **C**  $40 \text{ m s}^{-1}$       **D**  $400 \text{ m s}^{-1}$

**Space for working**