9 A car is moving at constant speed in a straight line with the engine providing a driving force equal to the resistive force F.

When the engine is switched off, the car is brought to rest in a distance of 100 m by the resistive force.

It may be assumed that F is constant during the deceleration.

The process is then repeated for the same car with the same initial speed but with a constant resistive force of $0.800F$.

How far will the car travel while decelerating?

A 120 m **B** 125 m **C** 156 m **D** 250 m