

- 6** A car of mass $1.2 \times 10^3 \text{ kg}$ travels along a horizontal road at a speed of 10 m s^{-1} . It then accelerates at 0.20 m s^{-2} . At the instant it begins to accelerate, the total resistive force acting on the car is 160 N .

What total output power is developed by the car as it begins the acceleration?

- A** 0.80 kW **B** 1.6 kW **C** 2.4 kW **D** 4.0 kW