

- 6** An aircraft, powered by a jet engine, is flying at a constant speed of  $800 \text{ m s}^{-1}$ . 20 kg of exhaust gas is ejected from the engine every second, with a velocity of  $100 \text{ m s}^{-1}$  in the opposite direction relative to the aircraft.

What is the magnitude of the resistive force experienced by the aircraft?

- A** 2 000 N
- B** 14 000 N
- C** 16 000 N
- D** 18 000 N