

- 12** A driving force of 200 N is needed for a car of mass 800 kg to travel along a level road at a speed of 20 m s^{-1} .

What power is required to maintain the car at this speed up a gradient in which the car rises 1 m for each 8 m of travel along the road?

- A** 6.0 kW **B** 7.2 kW **C** 20 kW **D** 24 kW

- 13** A speed boat with two engines, each of power output 20 kW, can travel at a maximum speed of