

17 The force resisting the motion of a car is taken as being proportional to the square of the car's speed. The magnitude of the force at a speed of 20 m s^{-1} is 800 N.

What effective power is required from the car's engine to maintain a steady speed of 40 m s^{-1} ?

A 32 kW

B 64 kW

C 128 kW

D 512 kW

18 The data below are taken from a test of a petrol engine for a motor car.