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