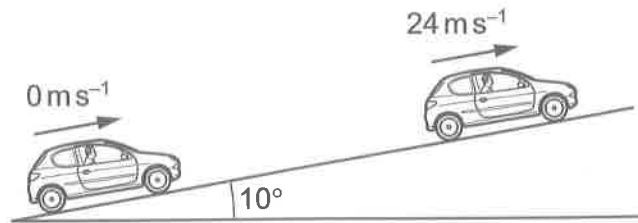16 A car of mass 1000 kg accelerates uniformly up a road inclined at 10° to the horizontal. Starting from rest, the car reaches a speed of 24 m s⁻¹ in 10 seconds.

Ignoring resistive forces, what is the power output of the car's engine when the car reaches the speed of 24 m s⁻¹?

A   28 kW   B   49 kW   C   57 kW   D   98 kW