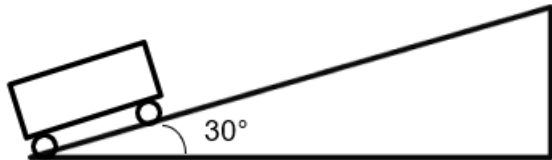8 For a toy car of mass 500 g to overcome the frictional forces on a horizontal rough surface and move at a constant speed of 0.10 m s⁻¹, it requires an output power of 1.0 W. The resistive forces are assumed to be constant at all speeds.

What is the total output power developed by the car as it moves up the same rough surface, now banked at an angle of 30° with the constant speed 0.20 m s⁻¹?

A   2.0 W   **B**   2.5 W   **C**   2.8 W   **D**   3.0 W