

17 A motor is used to lift a load vertically upwards.

The load has weight W .

The motor produces useful power output P .

The load is lifted at constant velocity v .

Which expression gives the time taken for the motor to lift the load vertically upwards through a distance d ?

A $\frac{P}{Wd}$

B $\frac{Wv}{P}$

C $\frac{Wd}{P}$

D $\frac{Pv}{W}$