

**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**  $\frac{Pv}{W}$