

- 2 The frequency  $f$  of vibration of a mass  $m$  supported by a spring with spring constant  $k$  is given by the equation

$$f = Cm^p k^q$$

where  $C$  is a constant with no units.

What are the values of  $p$  and  $q$ ?

	$p$	$q$
A	$-\frac{1}{2}$	$-\frac{1}{2}$
B	$-\frac{1}{2}$	$\frac{1}{2}$
C	$\frac{1}{2}$	$-\frac{1}{2}$
D	$\frac{1}{2}$	$\frac{1}{2}$