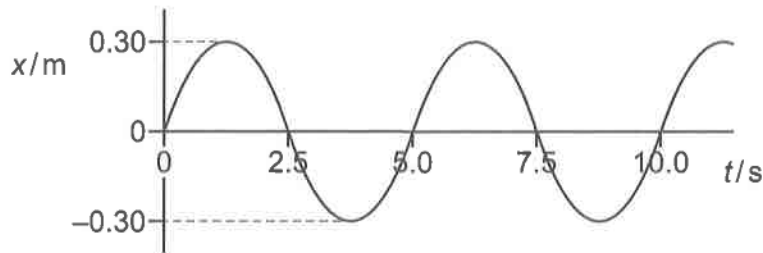


**14** A pendulum oscillates with simple harmonic motion.

Its motion is represented by the graph of its displacement  $x$  against time  $t$ .



Which equation relates the velocity  $v$  of the pendulum, in  $\text{m s}^{-1}$ , to the time  $t$  in s?

**A**  $v = 0.30 \cos 1.3 t$

**B**  $v = 0.30 \cos 31 t$

**C**  $v = 0.38 \cos 1.3 t$

**D**  $v = 9.4 \cos 31 t$