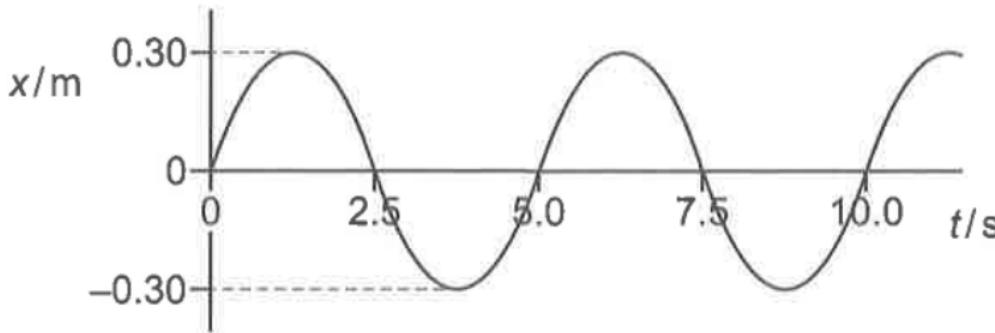


14 A pendulum oscillates with simple harmonic motion.

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  $v = 0.30 \cos 1.3t$
- B  $v = 0.30 \cos 31t$
- C  $v = 0.38 \cos 1.3t$
- D  $v = 9.4 \cos 31t$

15 What is the value of  $f$ ?