

**25** The frequency of a certain wave is 500 Hz and its speed is  $340 \text{ m s}^{-1}$ .

What is the phase difference between the motions of two points on the wave 0.17 m apart?

**A**  $\frac{\pi}{4} \text{ rad}$

**B**  $\frac{\pi}{2} \text{ rad}$

**C**  $\frac{3\pi}{4} \text{ rad}$

**D**  $\pi \text{ rad}$