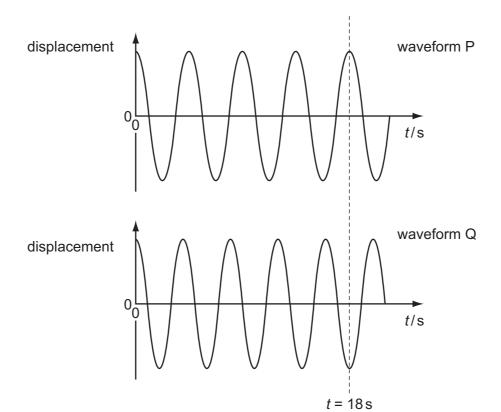
26 The diagram shows two sinusoidal waveforms.



At time t = 0 the waves are in phase. At the dotted line, $t = 18 \, \text{s}$.

At which time is the phase difference between the two oscillations $\frac{1}{8}$ of a cycle?

A 4.0 s

B 4.5s

C 8.0 s

D 9.0 s

Space for working