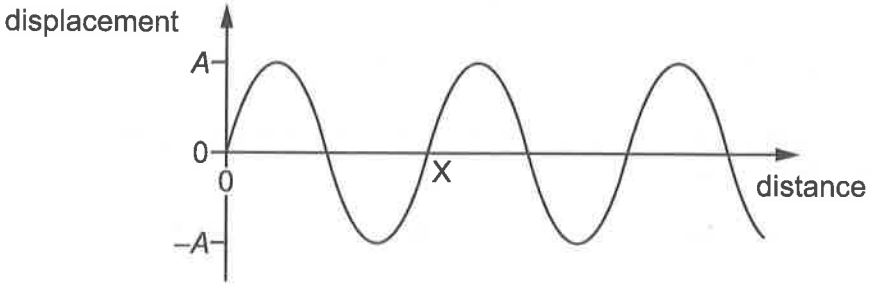
19 The graph shows a progressive wave of period T and amplitude A at time $t = 0$.

At position X, the progressive wave has zero displacement at $t = 0$.



A second progressive wave of equal period and amplitude travels in the opposite direction.

A standing wave is formed by the superposition of these progressive waves.

At $t = 0$, the standing wave has a displacement of $\frac{-A}{2}$ at X.

At which times does the displacement of the standing wave at position X become $\frac{A}{2}$ and $\frac{-A}{2}$ respectively?

A $t = \frac{T}{4}$ and $t = \frac{T}{2}$

B $t = \frac{T}{4}$ and $t = \frac{3T}{4}$

C $t = \frac{T}{2}$ and $t = \frac{3T}{4}$

D $t = \frac{T}{2}$ and $t = T$