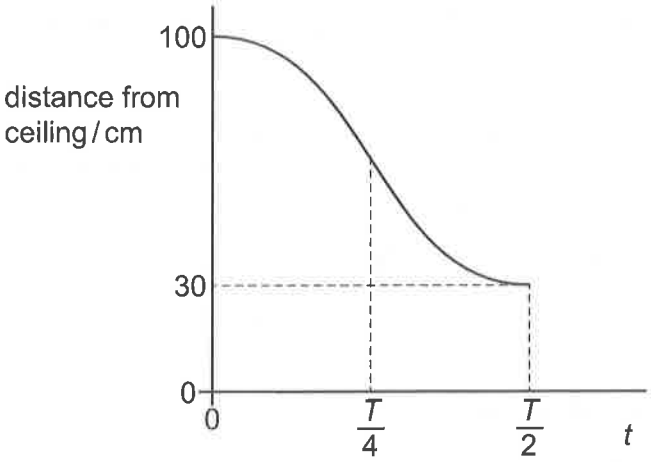
15 A mass, hanging from a spring suspended from the ceiling, is pulled down and then released. The mass then oscillates vertically with simple harmonic motion of period T.

The graph shows how its distance from the ceiling varies with time t.



What can be deduced from this graph?

A The amplitude of the oscillation is 70 cm.

B The kinetic energy is a maximum at $t = \frac{T}{2}$.

C The restoring force on the mass increases between $t = 0$ and $t = \frac{T}{4}$.

D The speed is a maximum at $t = \frac{T}{4}$.