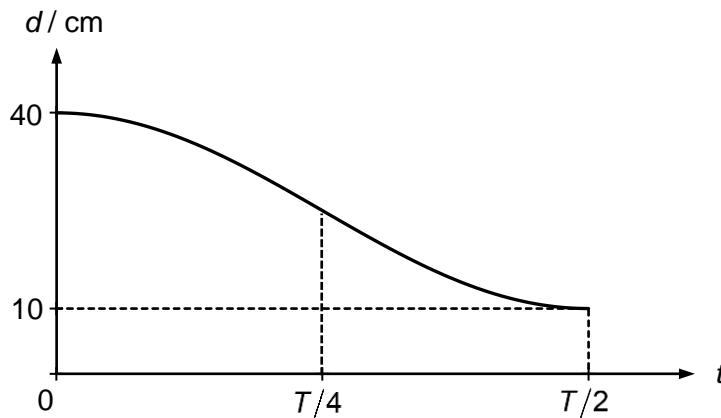


- 17 A mass is attached to a spring that is suspended from a ceiling. The mass is displaced vertically downwards from its equilibrium position and released such that it performs simple harmonic motion with period T .

The graph shows the variation with time t of the vertical distance d of the mass from the ceiling.



Which of the following statements is not correct?

- A The speed is maximum at $T/4$.
- B The amplitude of oscillation is 30 cm.
- C The restoring force on the mass is zero at $d = 25$ cm.
- D The magnitude of the acceleration of the mass increases from $T/4$ to $T/2$.