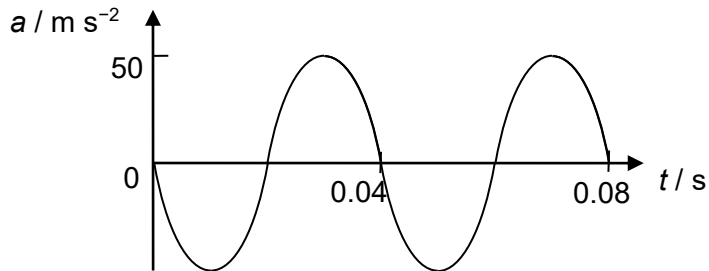


- 14** A body performs simple harmonic motion with period T . The graph shows the variation with time t of its acceleration a .



What is the ratio of the body's displacement to its amplitude at time $t = \frac{5T}{8}$?

- A** -0.71 **B** 0.71 **C** -0.87 **D** 0.87

- 15** In a horizontal spring-mass system, a mass m oscillates with a frequency f and an amplitude x .