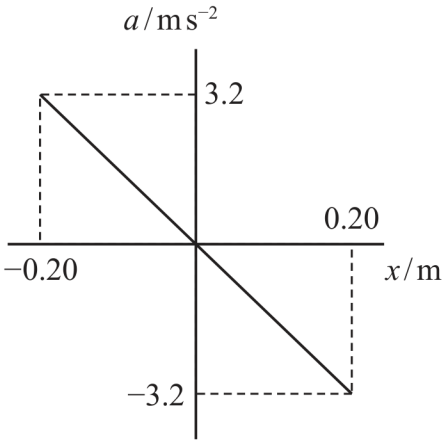
10 A mass oscillates with simple harmonic motion. The graph shows how the acceleration a of the mass depends upon displacement x from the equilibrium position.



Which of the following gives the period of oscillation, in seconds, of the mass?

☒ **A** $2\pi \times \left(\frac{3.2}{0.20}\right)$

☒ **B** $2\pi \times \left(\frac{0.20}{3.2}\right)$

☒ **C** $2\pi \times \sqrt{\left(\frac{3.2}{0.20}\right)}$

☒ **D** $2\pi \times \sqrt{\left(\frac{0.20}{3.2}\right)}$

(Total for Question 10 = 1 mark)