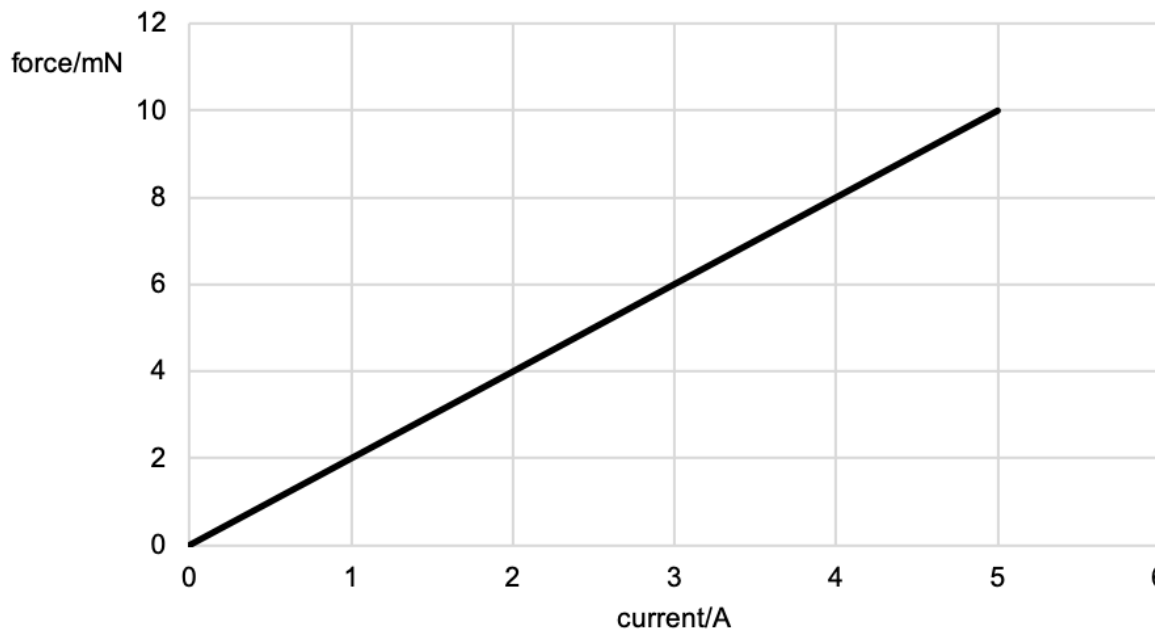


- 25** A wire of length 0.50 m, forming part of a complete circuit, is positioned at right angles to a uniform magnetic field. The graph shows how the force is acting on the wire due to the magnetic field varies as the current in the wire is increased.



The circuit is switched off. The same piece of wire is then strummed such that it vibrates with an amplitude of 1.5×10^{-3} m and at an angular frequency of 630 rad s^{-1} .

What is the maximum e.m.f. induced across the wire?

- A** $9.3 \times 10^{-4} \text{ V}$ **B** $1.86 \times 10^{-3} \text{ V}$ **C** 0.63 V **D** 1.86 V

