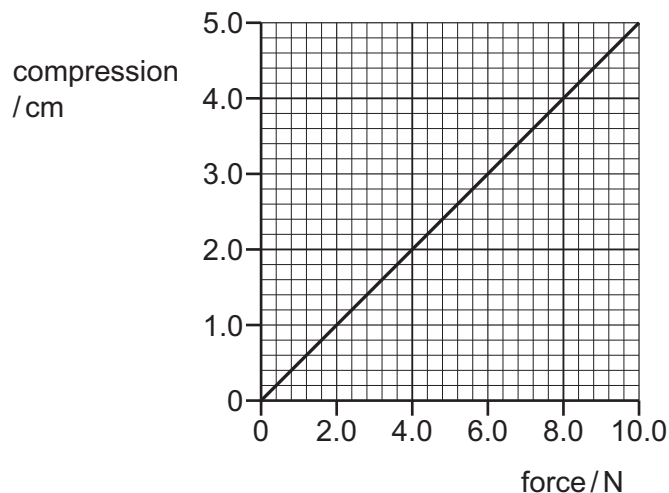
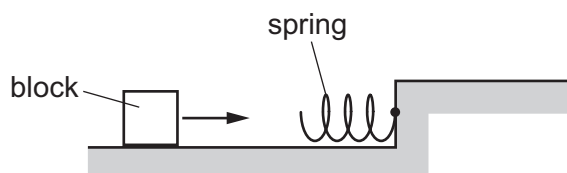


- 21** The variation of the compression of a spring with the force applied to it is shown in the graph.



A block slides along a horizontal frictionless surface towards the spring, as shown.



The block is brought to rest by the spring. When the spring reaches a compression of 4.0 cm, all of the kinetic energy of the block is transferred to the elastic potential energy of the spring.

What is the kinetic energy of the block when it first makes contact with the spring?

- A** 0.16 J **B** 0.32 J **C** 16 J **D** 32 J

- 22** A longitudinal wave travels through a long spring. The spring is shown at one instant.

What is the wavelength of the wave?

