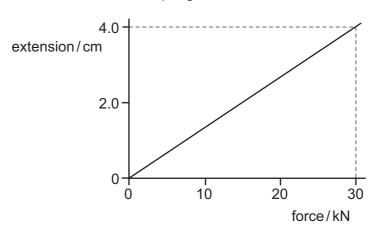
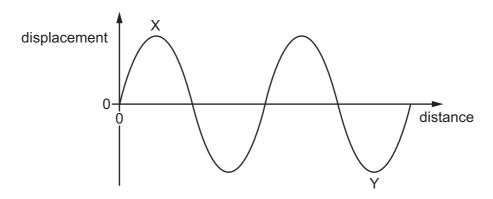
19 The graph shows how the extension of a spring varies with the force used to stretch it.



What is the strain energy in the spring when the extension is 4.0 cm?

- **A** 60 J
- **B** 120 J
- **C** 600 J
- **D** 1200 J

**20** The displacement-distance graph for a transverse progressive wave is shown.



The phase difference between points X and Y can be expressed as  $(180 n)^{\circ}$ .

What is the value of *n*?

- **A** 1.5
- **B** 2.5
- **C** 3.0
- **D** 6.0