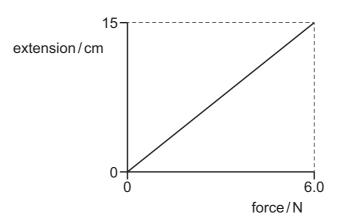
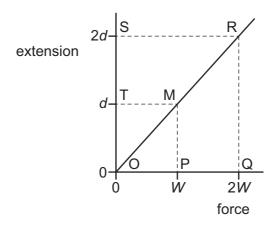
19 An extension–force graph for a spring is shown.



What is the spring constant of the spring?

- \mathbf{A} 0.025 N m⁻¹
- **B** $0.40\,\mathrm{N}\,\mathrm{m}^{-1}$
- **C** 2.5 N m⁻¹
- **D** 40 N m⁻¹
- **20** A wire is extended by a force. The graph shows how the extension of the wire varies with the force applied.



Initially a force W gives an extension d. The force is then increased to 2W. This increases the extension to 2d.

Which area of the graph represents the work done by the force when the force increases from W to 2W?

- **A** ORQ
- **B** OQRS
- **C** ORS
- **D** TMRS