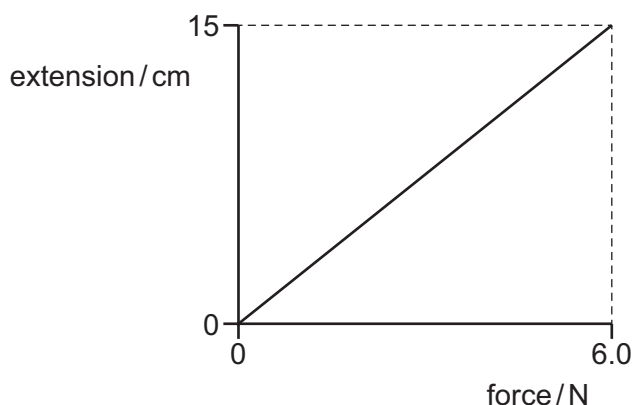
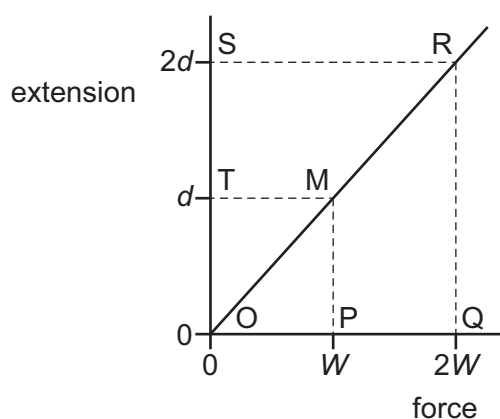


- 19 An extension–force graph for a spring is shown.



What is the spring constant of the spring?

- A  $0.025 \text{ N m}^{-1}$     B  $0.40 \text{ N m}^{-1}$     C  $2.5 \text{ N m}^{-1}$     D  $40 \text{ N m}^{-1}$
- 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