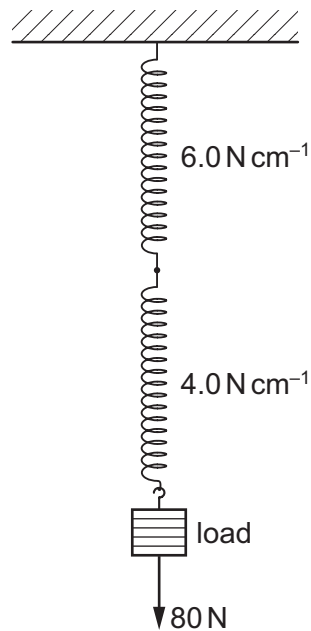
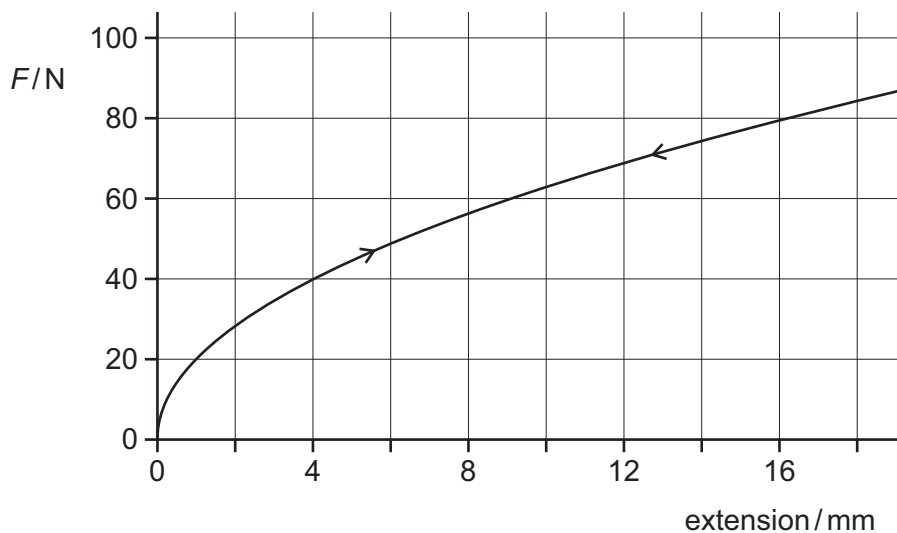


- 20** A spring has a spring constant of  $6.0 \text{ N cm}^{-1}$ . It is joined to another spring whose spring constant is  $4.0 \text{ N cm}^{-1}$ . A load of  $80 \text{ N}$  is suspended from this composite spring.



What is the extension of this composite spring?

- A** 8.0 cm      **B** 16 cm      **C** 17 cm      **D** 33 cm
- 21** The graph shows the extension of a sample of a type of rubber as different loads  $F$  are applied and then gradually removed.



What is the best estimate of the strain energy in the rubber when a load of  $80 \text{ N}$  is applied?

- A** 0.40 J      **B** 0.64 J      **C** 0.88 J      **D** 1.3 J