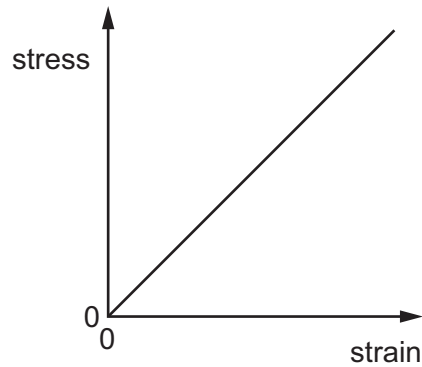
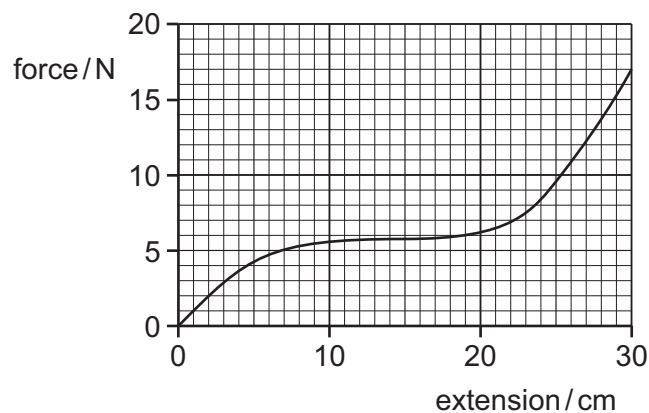


- 20 The stress-strain graph for a glass rod, up to the point at which it breaks, is shown below.



Which statement about the glass rod is correct?

- A Hooke's law is obeyed for all values of stress up to the breaking point.
 - B The glass is ductile.
 - C The glass shows plastic deformation.
 - D When the cross-sectional area of the rod is doubled, the ultimate tensile stress of the rod is halved.
- 21 A rubber band is stretched by hanging weights on it and the force-extension graph is plotted from the results.



What is the best estimate of the strain energy stored in the rubber band when it is extended 30 cm?

- A 1.8 J
- B 2.6 J
- C 5.1 J
- D 200 J

Space for working