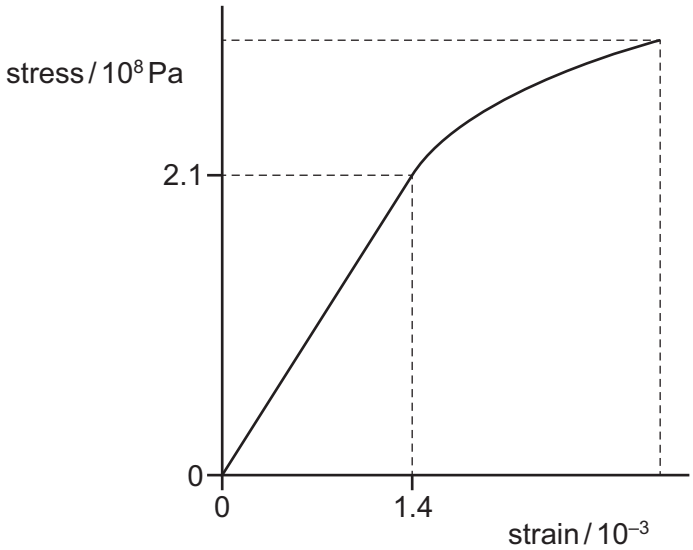
19 The stress–strain graph for a wire is shown.



What is the Young modulus of the material of the wire?

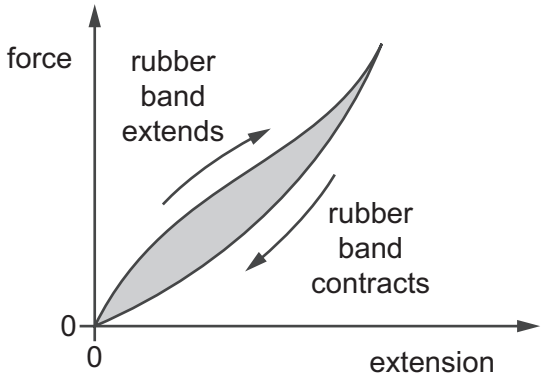
A 6.7×10^{-12} Pa

B 6.7×10^{-9} Pa

C 1.5×10^{8} Pa

D 1.5×10^{11} Pa

20 The diagram shows a force–extension graph for a rubber band as the band is extended and then the stretching force is decreased to zero.



What can be deduced from the graph?

A The rubber band does not return to its original length when the force is decreased to zero.

B The rubber band obeys Hooke's law for the extensions shown.

C The rubber band remains elastic for the extensions shown.

D The shaded area represents the work done in extending the rubber band.