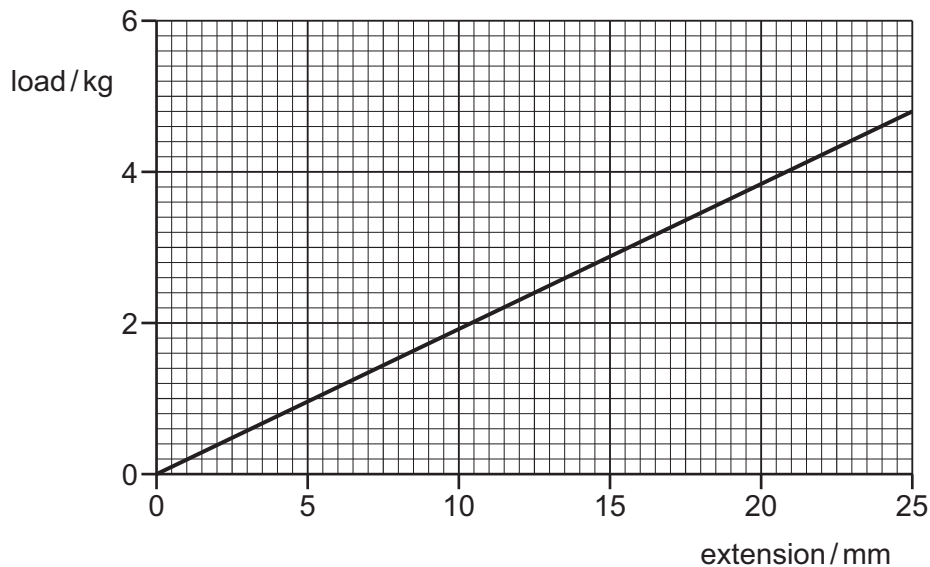


21 The graph is a load-extension graph for a wire undergoing elastic deformation.



How much work is done on the wire to increase the extension from 10 mm to 20 mm?

- A** 0.028 J **B** 0.184 J **C** 0.28 J **D** 0.37 J

22 Which statement about longitudinal waves is correct?

- A** Longitudinal waves include radio waves travelling through air.
B Particles in a longitudinal wave vibrate at right-angles to the direction of transfer of wave energy.
C Some types of longitudinal wave can be polarised.
D Stationary waves can be produced by the superposition of longitudinal waves.

23 The order of magnitude of the frequency of the longest-wavelength ultraviolet waves can be expressed as 10^x Hz.

What is the value of x ?

- A** 13 **B** 15 **C** 17 **D** 19

Space for working