

13 A spring is stretched by a distance of 2.7 cm. The elastic potential energy stored in the spring at this stage is 0.062 J. It is then stretched by a further 5.1 cm.

The extension of the spring is proportional to the stretching force throughout.

How much work needs to be done to cause this further stretching?

A 0.12 J

B 0.46 J

C 0.52 J

D 0.68 J

14 A uniform plank of weight W and length L is supported at points X and Y, each at distance $\frac{L}{4}$ from the ends.