

- 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  $\frac{l}{4}$