

3 When a force  $F$  is applied to a spring with stiffness  $k$ , the elastic potential energy stored is  $E$ .

What is the elastic potential energy stored when a force  $2F$  is applied to a spring with stiffness  $2k$ ?

☐ **A**  $\frac{E}{2}$

☐ **B**  $E$

☐ **C**  $2E$

☐ **D**  $8E$

(Total for Question 3 = 1 mark)