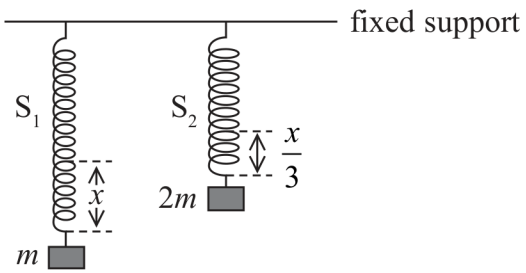
3 Two different springs, S_1 and S_2, are suspended from a fixed support. Masses are attached to the bottom of S_1 and S_2 as shown.



The extension of S_1 is x, and the extension of S_2 is $\frac{x}{3}$. The elastic strain energy in spring S_1 is E.

Which of the following is the elastic strain energy in spring S_2?

☒ **A** $6E$

☒ **B** $\frac{3E}{2}$

☒ **C** $\frac{2E}{3}$

☒ **D** $\frac{E}{6}$

(Total for Question 3 = 1 mark)