8 When a certain spring is stretched by a tensile force F, the elastic energy stored in the spring is E.
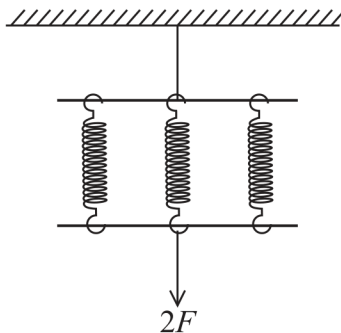
Three of these springs are arranged in parallel and stretched by a tensile force of $2F$, as shown.

Which of the following expressions gives the elastic energy stored in the parallel system?

☒ **A** $\dfrac{1}{3}E$

☒ **B** $\dfrac{2}{3}E$

☒ **C** $\dfrac{4}{3}E$

☒ **D** $2E$

(Total for Question 8 = 1 mark)