**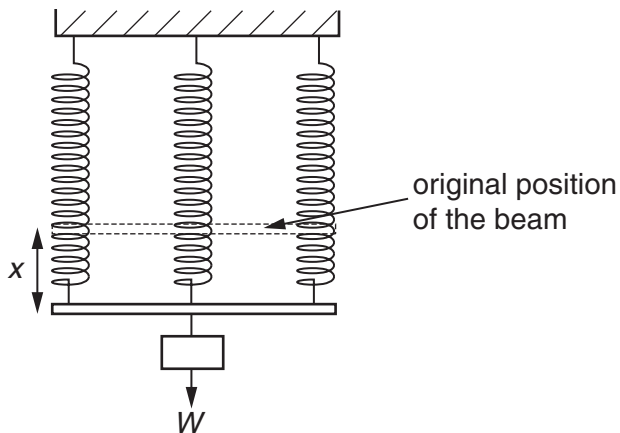22** A beam, the weight of which may be neglected, is supported by three identical springs. When a weight $W$ is hung from the middle of the beam, the extension of each spring is $x$.



original position of the beam

The middle spring and the weight are removed.

What is the extension when a weight of $2W$ is hung from the middle of the beam?

**A** $\dfrac{3x}{2}$ **B** $\dfrac{4x}{3}$ **C** $2x$ **D** $3x$