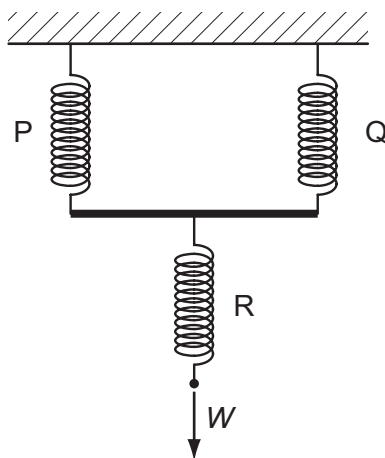


23 Three springs are arranged vertically as shown.



Springs P and Q are identical and have spring constant  $k$ . Spring R has spring constant  $3k$ .

What is the increase in the overall length of the arrangement when a force  $W$  is applied as shown?

A  $\frac{5W}{6k}$

B  $\frac{4W}{3k}$

C  $\frac{7}{2}kW$

D  $4kW$

Space for working