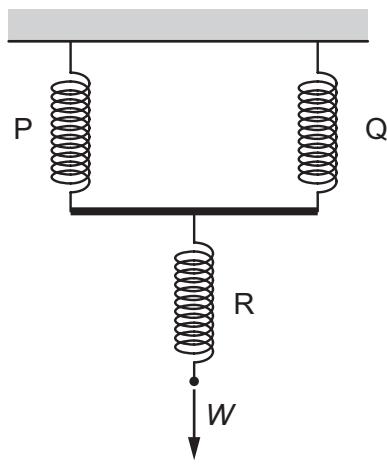


**21** Three springs are arranged vertically as shown.



Springs P and Q are identical and each has 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**  $4kW$