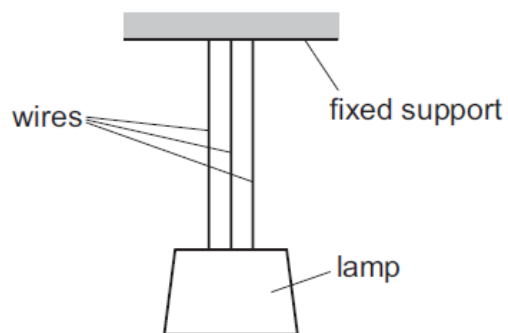


- 7 A lamp is suspended in equilibrium from a fixed support by three long identical wires.



The weight of the lamp causes each wire to have an extension of 0.40 cm. The height  $h$  of the lamp above the floor is measured.

The middle wire suddenly breaks and the lamp falls a small distance as the extensions of the remaining two wires increase. The wires obey Hooke's law. When the lamp is in equilibrium, the height  $h$  of the lamp above the floor is measured again.

What is the difference between the two values of  $h$ ?

- A** 0.20 cm      **B** 0.27 cm      **C** 0.40 cm      **D** 0.60 cm