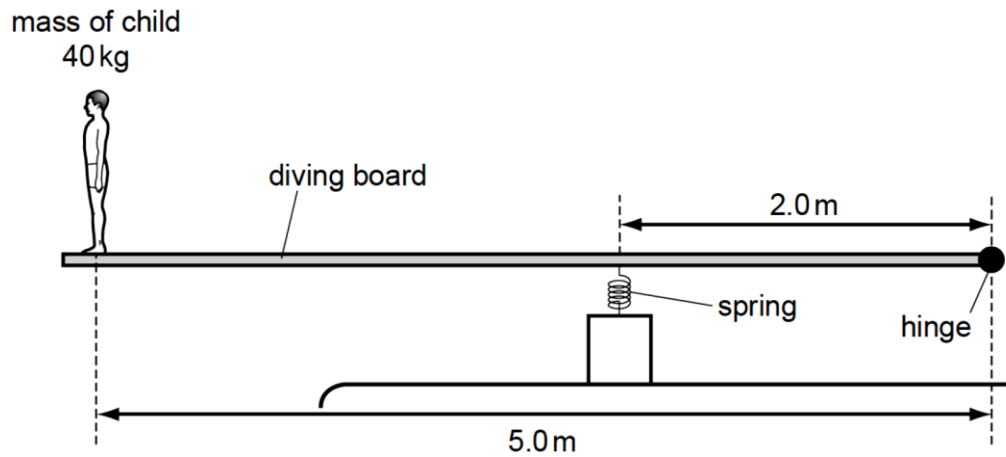


- 6 A diving board of length 5.0 m is hinged at one end and supported 2.0 m from this end by a spring of spring constant  $10 \text{ kN m}^{-1}$ . A child of mass 40 kg stands at the far end of the board.



What is the extra compression of the spring caused by the child standing on the end of the board?

- |                 |                 |
|-----------------|-----------------|
| <b>A</b> 1.0 cm | <b>B</b> 1.6 cm |
| <b>C</b> 9.8 cm | <b>D</b> 16 cm  |