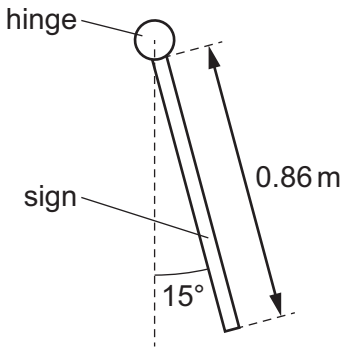
15 A square shop sign of uniform density has mass 2.4 kg and sides of length 0.86 m.

The sign is supported by a hinge along its top edge.

There is friction in the hinge so that the sign hangs from it in equilibrium at an angle of 15° to the vertical, as shown.



What is the moment about the hinge of the weight of the sign?

A 2.6 N m **B** 4.0 N m **C** 5.2 N m **D** 9.8 N m