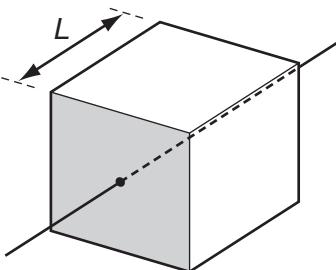
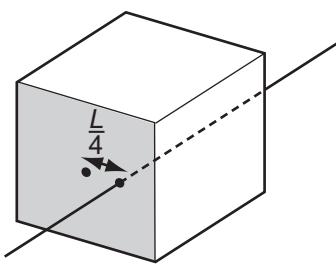


- 15 The diagram shows a solid cube with weight  $W$  and sides of length  $L$ . It is supported by a frictionless spindle that passes through the centres of two opposite vertical faces. One of these faces is shaded.



The spindle is now removed and replaced at a distance  $\frac{L}{4}$  to the right of its original position.



When viewing the shaded face, what is the torque of the couple that will now be needed to stop the cube from toppling?

A  $\frac{WL}{2}$  anticlockwise

B  $\frac{WL}{2}$  clockwise

C  $\frac{WL}{4}$  anticlockwise

D  $\frac{WL}{4}$  clockwise

**Space for working**