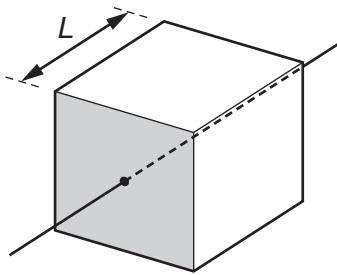
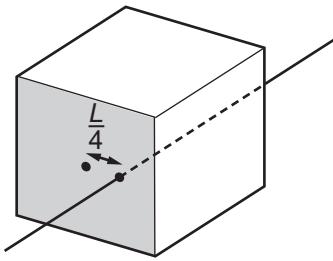


- 12 The diagram shows a solid cube with weight W and sides of length L . It is supported at rest by a frictionless spindle that passes through the centres of two opposite vertical faces. One of these faces is shaded.



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 keep the cube at rest?

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

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

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

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