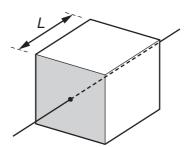
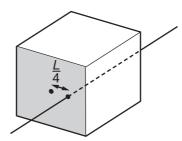
12 The diagram shows a solid cube with weight *W* and sides of length *L*. It is supported at rest by a frictionless spindle that passes through the centres of two opposite vertical faces. One of these faces is shaded.



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
- $\mathbf{B} \quad \frac{WL}{4} \text{ clockwise}$
- $\mathbf{C} = \frac{WL}{2}$  anticlockwise
- $\mathbf{D} \quad \frac{WL}{2} \text{ clockwise}$