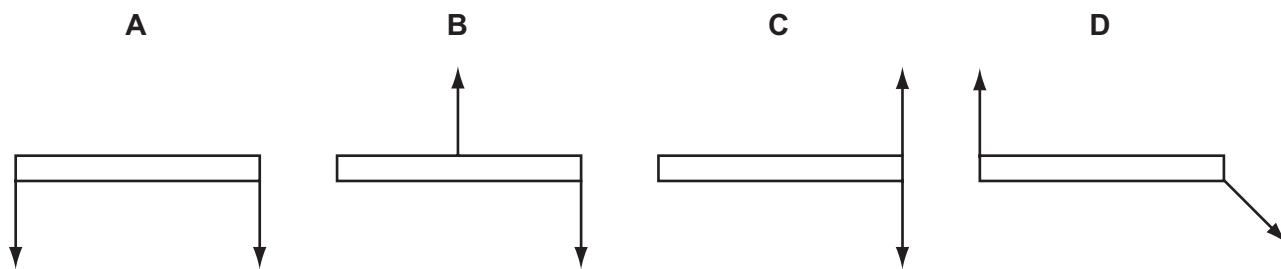
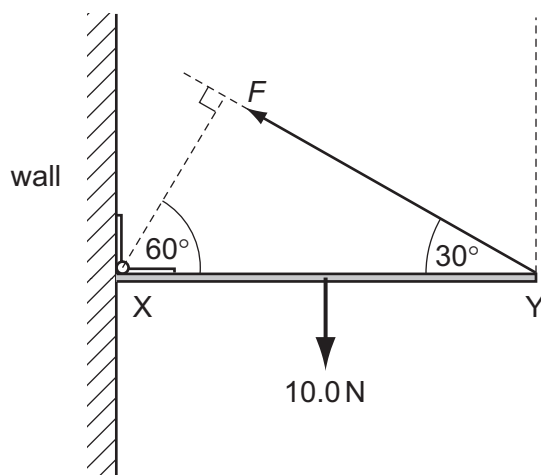


**15** The diagrams all show a pair of equal forces acting on a metre rule.

Which diagram shows forces that provide a couple and zero resultant force?



**16** A uniform rod XY of weight 10.0 N is freely hinged to a wall at X. It is held horizontal by a force  $F$  acting from Y at an angle of  $30^\circ$  to the horizontal, as shown.



What is the value of  $F$ ?

- A** 5.0 N      **B** 8.7 N      **C** 10.0 N      **D** 20.0 N

**Space for working**