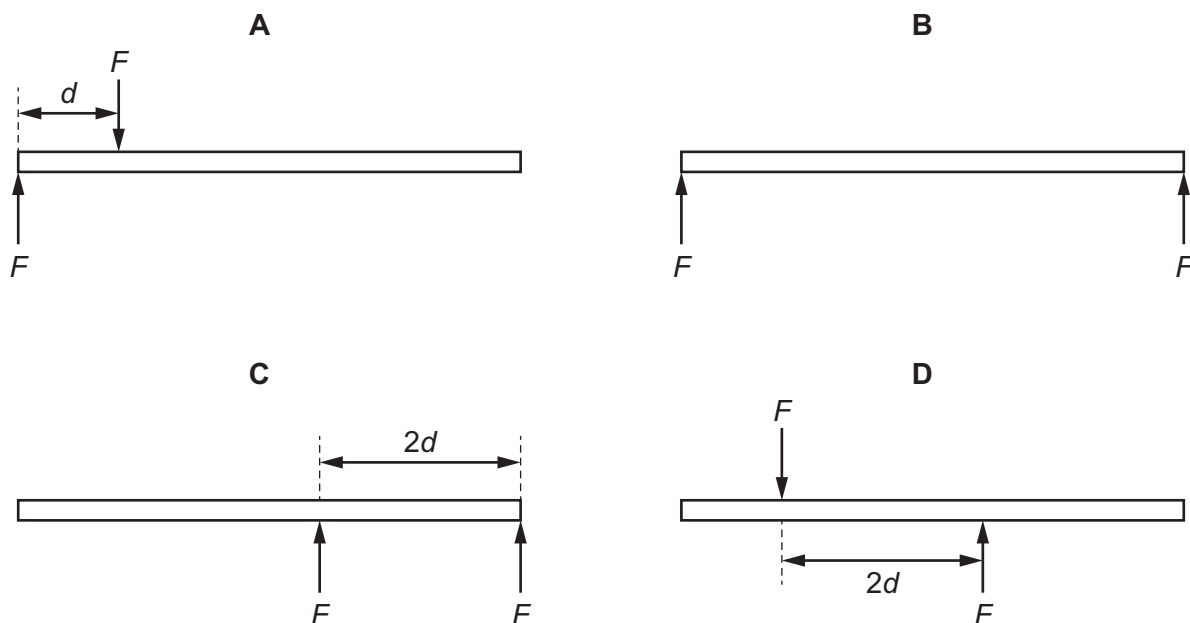
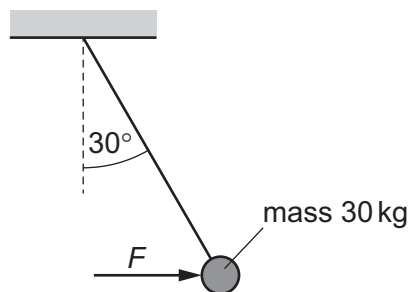


- 12 Two parallel forces, each of magnitude  $F$ , act on a rod of length  $5d$ .

Which diagram shows the positions of the two forces that will produce the largest torque on the rod?



- 13 A mass of  $30\text{ kg}$  is suspended from the end of a wire. A horizontal force  $F$  acts on the mass so that it is in equilibrium, with the wire at an angle of  $30^\circ$  to the vertical, as shown.



What is the magnitude of  $F$ ?

- A 17 N      B 150 N      C 170 N      D 510 N