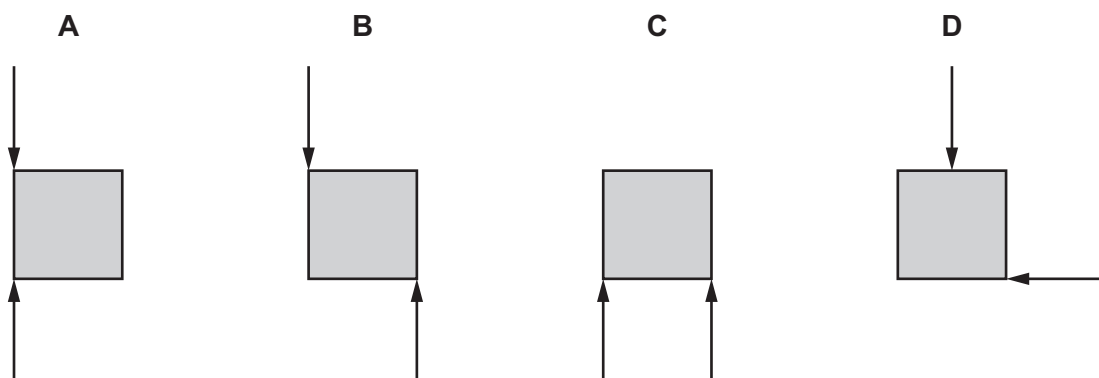
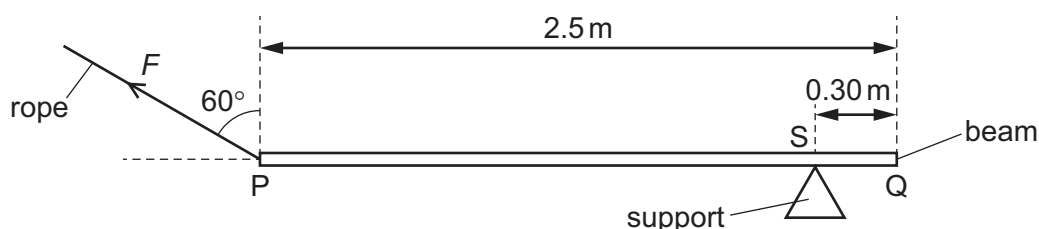


- 14 An isolated object of negligible weight is acted on by two coplanar forces of the same magnitude.

In which diagram is the object in equilibrium?



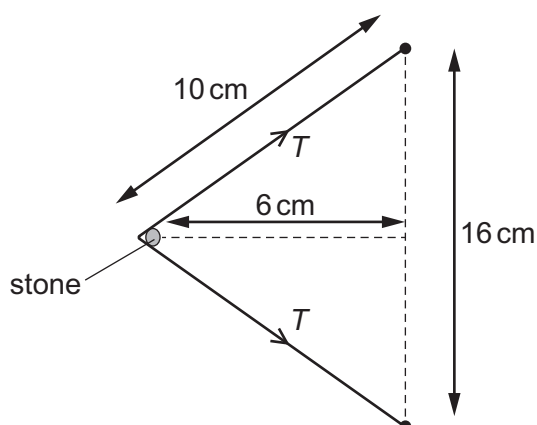
- 15 A uniform beam PQ rests horizontally on a support at point S.



A rope is attached at one end of the beam. The rope is at an angle of  $60^\circ$  to the vertical and exerts a force  $F$ , in newtons, on the beam.

What is the moment, in N m, of the force  $F$  about the point S?

- A  $1.1F$       B  $1.3F$       C  $1.9F$       D  $2.2F$
- 16 The diagram shows the dimensions of an elastic cord used to project a stone. The tension in the cord is  $T$  when the cord is pulled into the shape shown.



Which force does the elastic cord exert on the stone?

- A  $\frac{3}{5}T$       B  $\frac{6}{5}T$       C  $\frac{8}{5}T$       D  $2T$