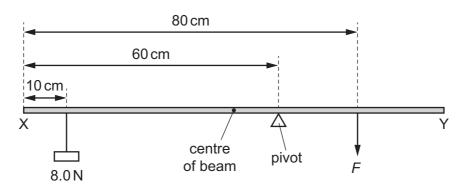
6 A uniform beam XY is 100 cm long and weighs 4.0 N.



The beam rests on a pivot 60 cm from end X.

A load of $8.0\,N$ hangs from the beam $10\,cm$ from end X.

The beam is kept balanced by a force *F* acting on the beam 80 cm from end X.

What is the magnitude of force *F*?

- **A** 8.0 N
- **B** 18N
- **C** 22 N
- **D** 44 N

7 The diagrams show four table lamps resting on a table. The position of the centre of mass of each lamp is labelled X.

Which lamp is the most stable?

