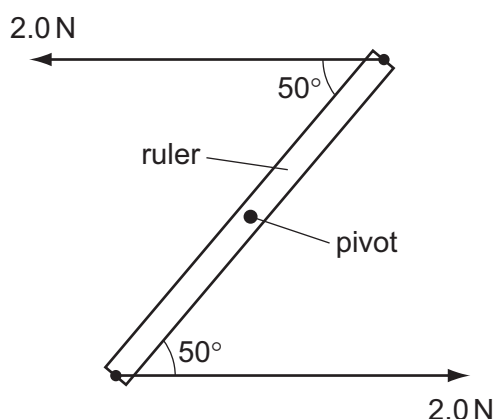


- 15 A ruler of length 0.30 m is pivoted at its centre. Equal and opposite forces of magnitude 2.0 N are applied to the ends of the ruler, creating a couple as shown.



What is the magnitude of the torque of the couple on the ruler when it is in the position shown?

- A** 0.23 N m **B** 0.39 N m **C** 0.46 N m **D** 0.60 N m
- 16 The first column in the table gives four examples of work being done. The second column gives more detail of the action.

Which row is **not** correct?

	example	detail
A	a girl dives from a diving board into a swimming pool	work is done by the girl against gravity as she falls
B	a man pushes a car along a level road	work is done by the man against friction
C	an electron is accelerated towards a positively-charged plate	work is done on the electron by the electric field of the plate
D	a piston is pushed outwards as a gas expands	work is done on the atmosphere by the gas

Space for working