

Moments

Question Paper

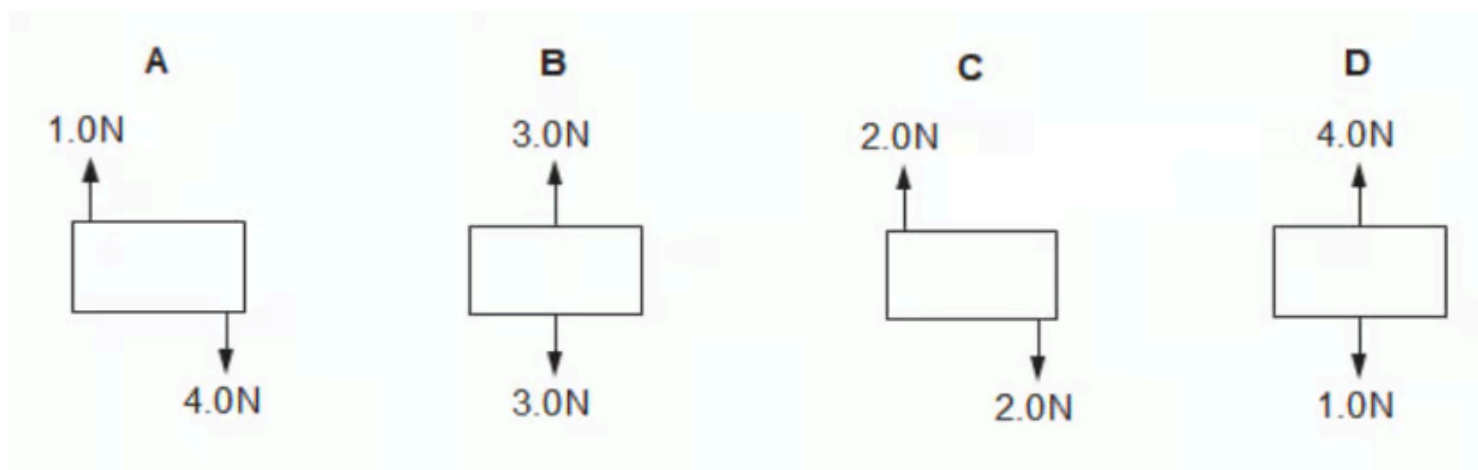
Course	CIE IGCSE Physics
Section	1. Motion, Forces & Energy
Topic	Moments
Difficulty	Easy

Time Allowed	10
Score	/5
Percentage	/100

Question 1

Four objects are shown below. Each is acted on by two forces.

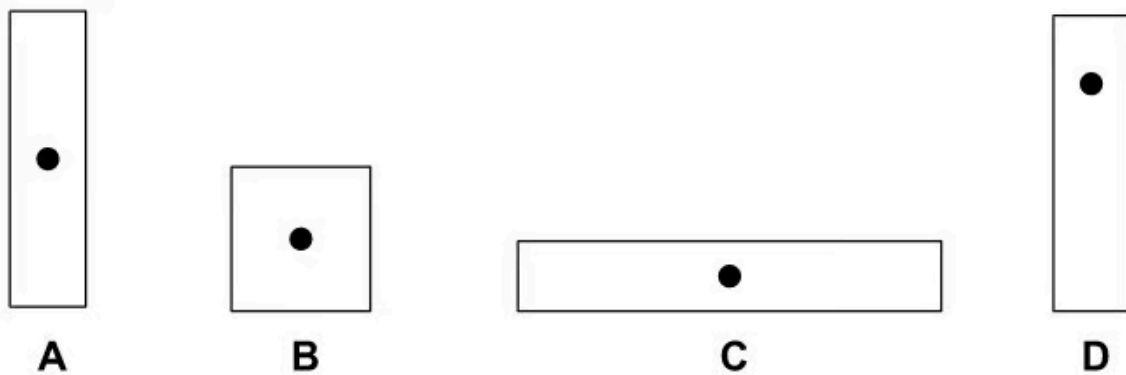
Which of the objects is in equilibrium?



[1 mark]

Question 2

Four cuboids are shown in the diagram below. The position of their centre of gravity is also shown.

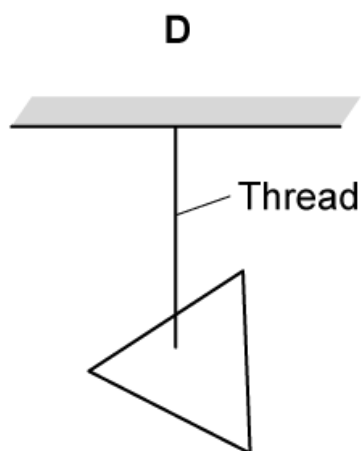
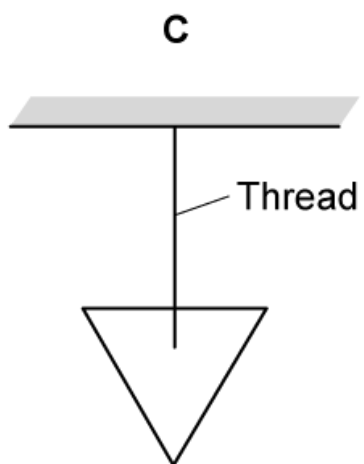
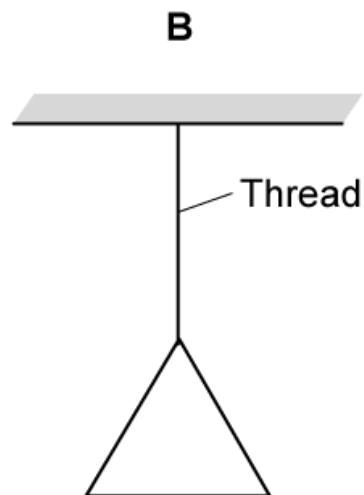
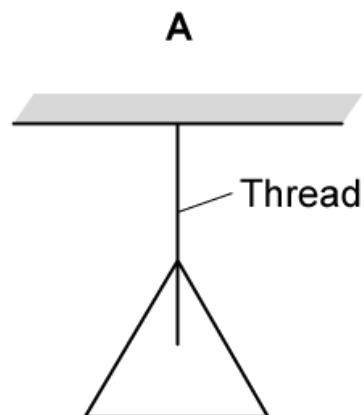


Which of the cuboids is the most stable?

[1 mark]

Question 3

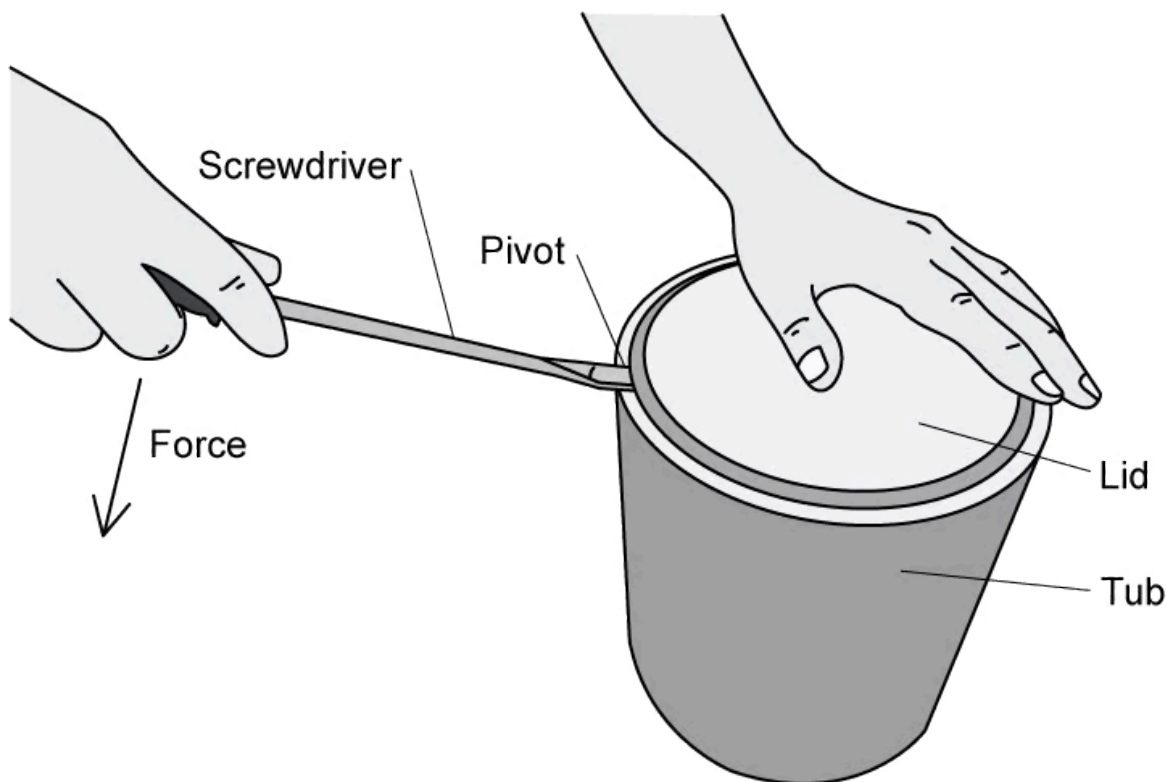
A triangle with uniform density is suspended from a thread. Which diagram shows a system which is **not** in equilibrium?



[1 mark]

Question 4

A woman is using a screwdriver to prise the lid off a cylindrical tub of paint.



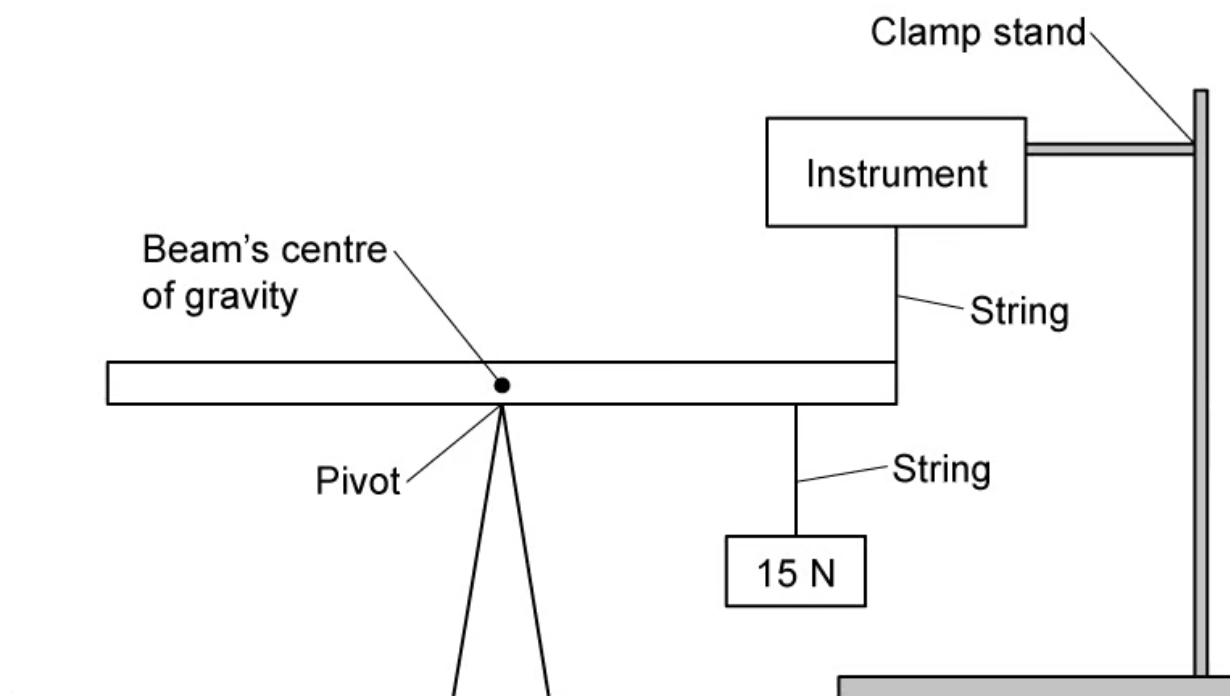
Which row states how she would increase the moment applied by the greatest amount?

	Type of screwdriver	Force applied
A	Wider	Double
B	Wider	Half
C	Longer	Double
D	Longer	Half

[1 mark]

Question 5**Extended tier only**

In a classroom, a uniform beam with a pivot at its centre has a 15 N weight suspended from one end. An instrument fixed to the ceiling is attached to the same end.



What instrument must be used to show that the resultant moment on a system in equilibrium is zero?

- A. Joulemeter
- B. Force meter
- C. Ruler
- D. Momentmeter

[1 mark]