

Edexcel Physics A-Level

Topic 2.3 - Moments

Flashcards

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What is a moment?



What is a moment?

A moment is the turning effect of a force.



State the equation used to calculate the moment of a force.



State the equation used to calculate the moment of a force.

Moment of a Force = Force x Distance



What distance must be used when calculating a moment?



What distance must be used when calculating a moment?

The perpendicular distance between the line of action of the force and the axis of rotation.



What is the unit of a moment?



What is the unit of a moment?

Nm



What is the principle of moments?



What is the principle of moments?

For an object to be in equilibrium, the sum of the clockwise moments about a point must be equal to the sum of the anticlockwise moments.



What is an object's centre of gravity?



What is an object's centre of gravity?

The single point through which the object's entire weight can be said to act.



What will occur if the line of action an object's centre of gravity lies outside its base?



What will occur if the line of action an object's centre of gravity lies outside its base?

The object's weight will produce a resultant moment and so if is unsupported, the object may topple.

