

Note Taking Guide - Episode 701

Types of Motion:

1. Translational Motion:

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2. Rotational Motion:

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Center of Gravity:

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-

When an object's center of gravity is -

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-

When an object is balanced, it is in rotational _____:
stable equilibrium -

unstable equilibrium -

A _____ center of gravity and a _____ base of support contribute toward rotational stability.

Rotational Inertia:

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-
-
-

Rotational Inertia depends on:

-
-

The greater the distance from the _____ of rotation, the _____ the rotational inertia.

A spinning girl brings her arms close to her body to _____ her rotational inertia and make her spin _____.

When a solid disk and a hollow ring of the same mass roll down a ramp, which one will reach the bottom first? _____ Explain.

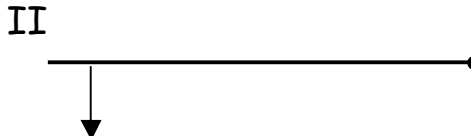
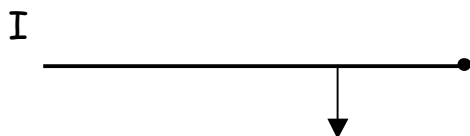
Torque:

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-

torque = _____ X _____

T = _____

lever arm (r) is the distance from the _____ point to the _____.



Which of the identical forces produces more torque, I or II? _____ Explain.

problem set #1 and Show What You Know (on back)