

CHAPTER OVERVIEW

37: Moment of Inertia

The moment of inertia is the rotational counterpart of mass. It takes into account not only the total mass of the body, but also how far the mass is distributed from the axis of rotation: a body will have a higher moment of inertia if it has a higher mass, or if more of the mass is distributed farther from the rotation axis. Two bodies can have the same mass, but different moments of inertia, if their mass is distributed through the bodies differently.

[37.1: Introduction to the Moment of Inertia](#)

[37.2: Radius of Gyration](#)

[37.3: Parallel Axis Theorem](#)

[37.4: Plane Figure Theorem](#)

[37.5: Routh's Rule](#)

[37.6: Lees' Rule](#)

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