

4-Minute Drill

Chapter 9-10

Distance a point on a body moves as the body rotates through an angle θ

Velocity of a point on a body as the body rotates with angular speed ω

Acceleration of a point on a body as the body's rotation rate increases

Angular velocity in terms of θ

Angular acceleration in terms of ω

One of the rotational kinematic equations ($\Delta\theta =$)

Another rotational kinematic equation ($\omega =$)

One more rotational kinematic equation ($\omega^2 =$)

Rotational kinetic energy formula

Total kinetic energy of a rolling body

Rotational inertia of discrete particle of mass m at a distance r from the axis

Rotational inertia of a cylinder with the axis through the center of the flat face

Rotational inertia of a solid sphere with the axis through the center

Torque in terms of force applied at a given distance from the rotational axis

Torque (Newton's 2nd Law for rotation)

Angular momentum

Another expression for angular momentum

Conservation of angular momentum

4-Minute Drill Take Two
Chapter 9-10

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