Science Virtual Learning

MPI Physics

Rotational Kinematics 2: Angular Velocity

April 3, 2020

Lesson: MPI Rotational Kinematics 2: Angular Velocity
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Objective: To understand the concept of angular velocity, and how to measure and calculate it

- This video discusses the concept of Angular Velocity, and how it is measured

https://youtu.be/30ueWJcxHEo

Video: Angular Velocity

- This video shows a number of worked examples related to angular velocity.

https://youtu.be/FqI17GvDE_A

Video: Angular Velocity Examples

1. A top spins 7.00 times per second. What is its angular velocity?

2. A record player spins at 33.3 rotations/minute. What is the period T of its rotation? What is its angular velocity?

Examples from the Video

Homework

- 1. Find the period (in seconds) and angular velocity (in rad/s) of the minute hand of a clock.
- 2. A basketball spins at an angular velocity of 49.3 rad/s. What is the period of its rotation?

- Try to solve the problem yourself, then watch the solution video here:
- https://youtu.be/NeKyT7nb78E
- That's it!