


Physics 231 - 13-Oct-99



- Announcements
- Kepler's Laws
- Rotational Kinematics
- quiz

Kepler's Laws



- Elliptic Orbits
- Equal Areas swept out in equal times
- $T^2 \sim R^3$

Rotational Kinematics



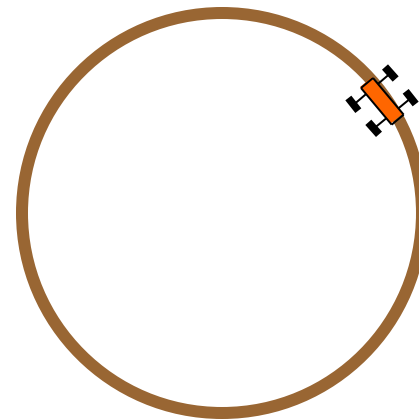
- Angular Displacement
- Angular Velocity
- Angular Acceleration

Q1 - Answer = c

Q2 - Problem A - Last name A-K

A car accelerates on a circular track of radius 1 km (1000 m). If it starts at rest and reaches a speed of 50 m/s at the end of 2 seconds, what is its average angular acceleration in radians/s²?

- A. $1/1000$
- B. $2/1000$
- C. $50/$
- D. $1/40$
- E. $1/20$



Q1 - Answer = c

Q2 - Problem B - Last Name L-Z

■ An automobile goes around a circular track of radius 750 m. If it accelerates from 15 to 30 m/s in a time of 7.5 s, what is its angular acceleration in radians/s²?

- A. $1/750$
- B. $2/750$
- C. 2.0
- D. $1/750$
- E. $2/750$

