Irish Applied Mathematics Teachers' Association

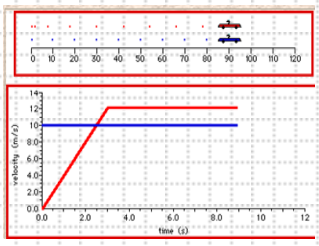
Cumann Múinteorí Matamaitice Feidhmí na hÉireann

APPLIED MATHEMATICS FOR LEAVING CERTIFICATE

COURSE CONTENT

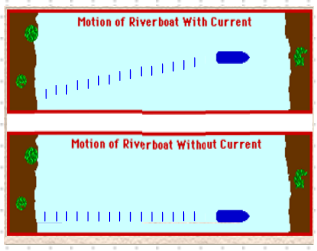
Kinematics

Kinematics describes the motion of objects without considering the forces that caused the motion.



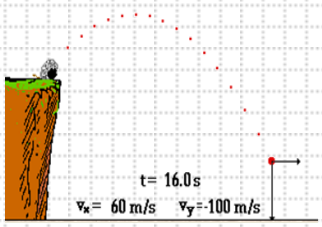
Relative Velocity

Relative velocity is a measurement of velocity between two objects moving in different frames of reference.



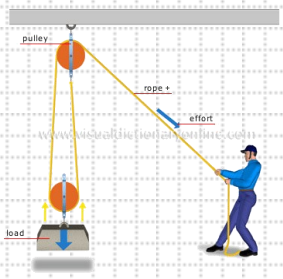
Ballistics

Ballistics is the study of Projectiles. "The wounding potential of projectiles is a complex matter". (*Fackler, 1996*)



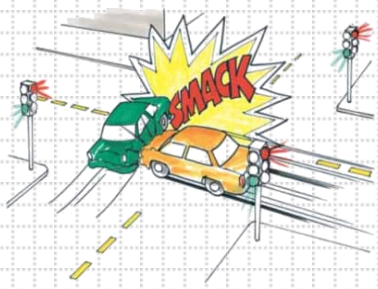
Pulleys and Wedges

A pulley is an example of a simple machine and are used and designed in order to reduce the amount of force needed to lift a load.



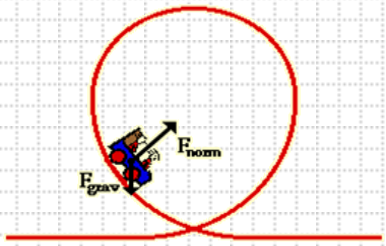
Momentum and Collisions

The outcome of a collision between bodies depends on the mass of each object and the direction and speed they were travelling just before the collision.



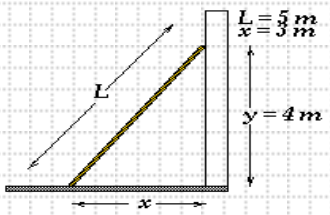
Circular Motion and SHM

Circular Motion is the study of forces on bodies travelling in a circular path.



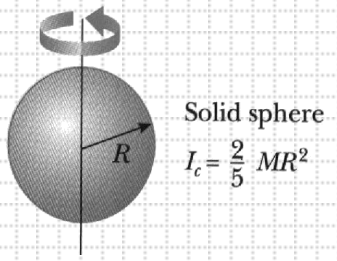
Statics

Statics is the study of forces and moments on systems in equilibrium.



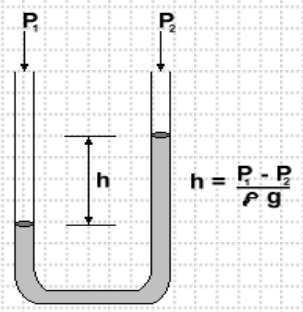
Moments of inertia

The moment of inertia of an object describes how difficult it is to change its angular motion about an axis.



Hydrostatics

Hydrostatics is the study of liquids and gases at rest.



Differential Equations

Differential Equations are the language in which the laws of nature are expressed.

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