2D Dynamics Objectives

Students should be able to:

- Resolve force vectors using the trig identities (sin, cos, tan, and Pythagorean Theorem).
- Define/Compare/Contrast resultant force and equilibrant force.
- Identify which component of force affects motion.
- Solve dynamic problems, similar to before, in two dimensions.
  - Solve problems down (or up) and inclined plane.
  - Solve "see-saw" problems, i.e. problems involving torques.
- Define equilibrium and state the two conditions necessary.
- Define torque and relate it to force.
- Define lever arm.
- Define fulcrum.
- Define center of mass (center of weight, center of gravity).