## Monday, March 18/13 Physics 112/111

- Return: Test Unit #1
   Optional Rewrite -> Thursday During Class
   See the next page for the test outline.
- 2. Textbooks
- 3. Practice Problems (PP) Page 137: 1-4
- 4. Contact/Non Contact Forces
- 5. FBDs (Free Body Diagrams)
- 6. State of Equilibrium
- 7. Practice Problems (PP) Page 144: 5-7



## Test - Unit #1 - Outline

- 1. physics
- 2. kinematics/dynamics
- 3. frames of reference: fixed/moving
- 4. scalar quantity magnitude only
- 5. conventional directions
- 6. vector quantity magnitude and direction
- 7. examples of scalar and vector quantities
- 8. graphical addition of vectors: tip-to-tail/parallelogram method
- 9. analytical addition of vectors
- 10. Level 1 subtracting vectors- perpendicular components
- 11. vocabulary: distance, position, displacement, time, speed, velocity, acceleration
- 12. symbols and units of physical quantities
- 13. types of motion: uniform/uniformly accelerated
- 14. position-time graphs
- 15. velocity-time graphs
- 16. relationship between directions of velocity and acceleration
- 17. checklist for word problems
- 18. motion equations including derivations
- 19. acceleration due to gravity
- 20. freely falling bodies