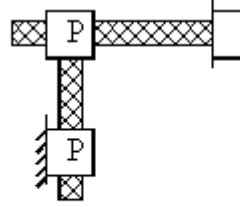
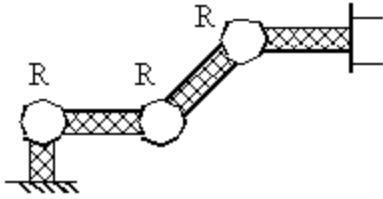


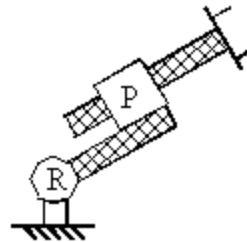
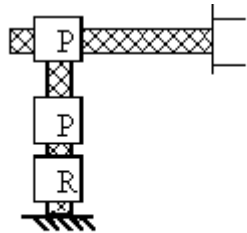
**Mechanical and Aerospace Engineering Department**  
**University of Texas at Arlington**  
**Introduction to Robotics – ME 5337**  
**Homework # 5**

**Due Date: Third class meeting from date of assignment**



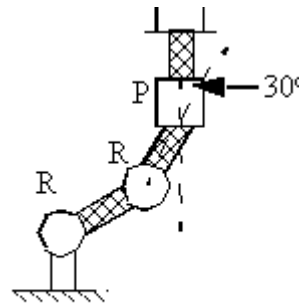
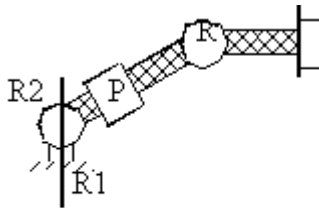
Problem 1: 3-Link Planar Manipulator

Problem 2: 2-Link Cartesian Manipulator



Problem 3: Cylindrical 3D Manipulator

Problem 4: 2-Link Planar Manipulator



Problem 5: 3-D Manipulator

Problem 6: Planar w/Bent Link

For the Mechanisms labeled 2, 4, 5, 6 find the inverse kinematics.  
 You might want to use results from previous homework sets.