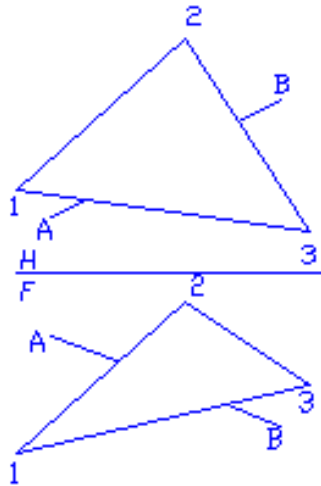


Engr 210 AA -- **Engineering Graphics**
HW #15 - **Piercing Point; Intersection of Planes; True Size of Planes**

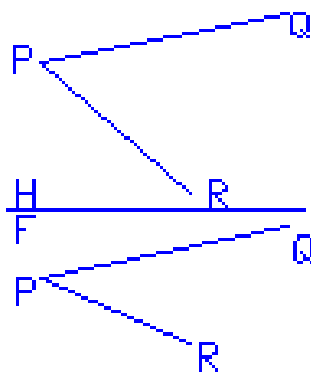
Name: _____

Problem 1: Find the piercing point of the line and plane **without constructing** an auxiliary view using the cutting-plane method. Show visibility of the line in all views.



Problems 2: Find the angle between lines PQ and PR by auxiliary views. Measure and label the angle.

Hint: Construct a view showing the true size of plane PQR.



Problem 3: Using the plane method, find the shortest pipe that slopes upward from point O to connect with pipe A-B with a standard 45° lateral. Show the connection in all views. Measure and label the length of the pipe from O to A-B.

