

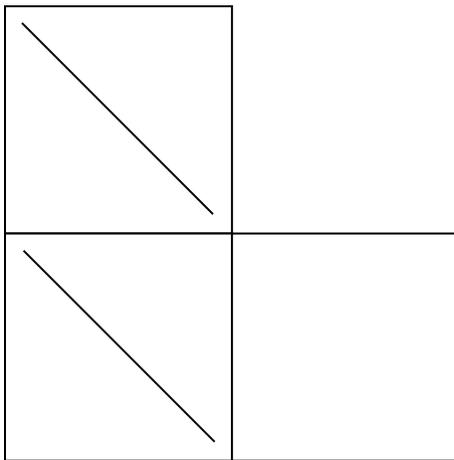
# Descriptive Geometry

## Problem Set A

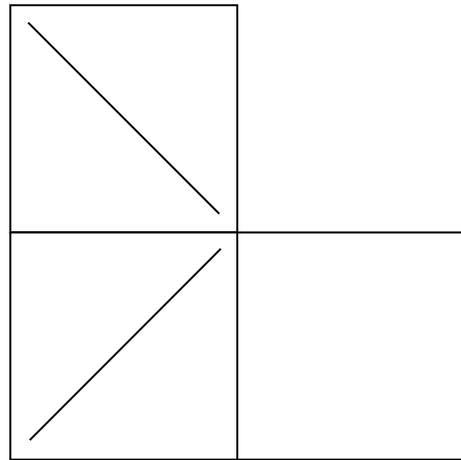
### Instructions:

For each drawing, there is a rod inside a cubic box. You are given two orthographic views: the top view and the front view. First, you should precisely describe on a separate sheet and *in your own words* how the rod is positioned in the box. (e.g. “The rod goes from the center of the bottom left edge to a point that is close to the upper back right corner.”) Be sure to state if the rod lies on, or is perpendicular to, a special plane (horizontal, frontal or symmetry plane). Then you should accurately draw the side view of the rod in colored pencil. Construction lines should be in lead pencil. Check for yourself that this side view is consistent with the description of the rod’s position.

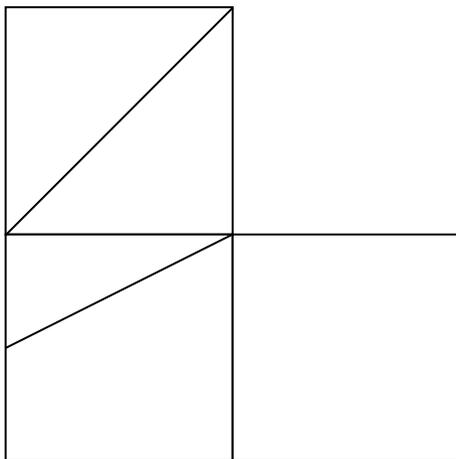
### Problem #1



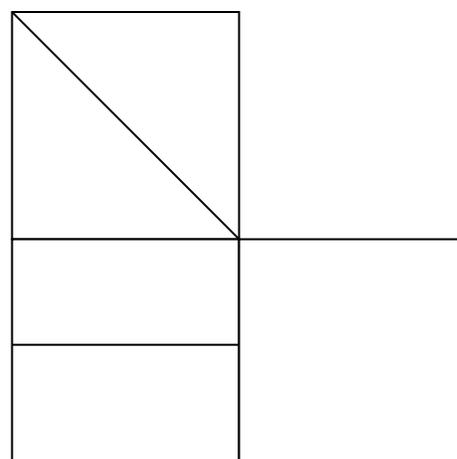
### Problem #2



### Problem #3

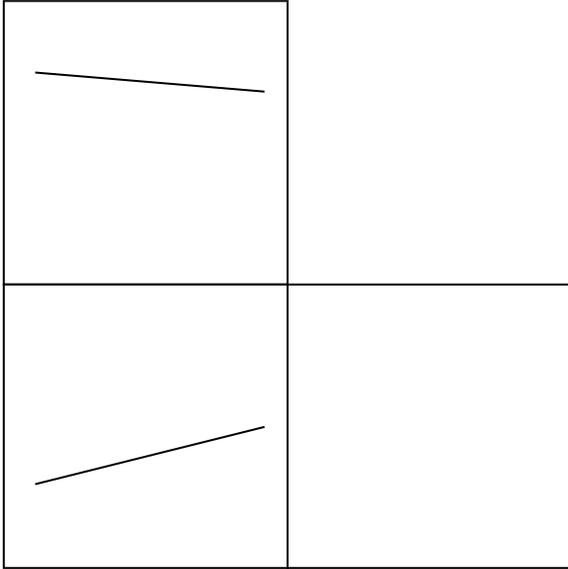


### Problem #4

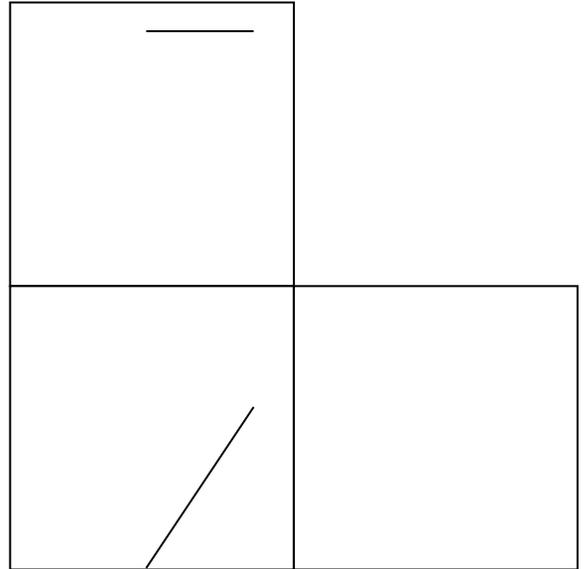


Descriptive Geometry  
**Problem Set A (Cont.)**

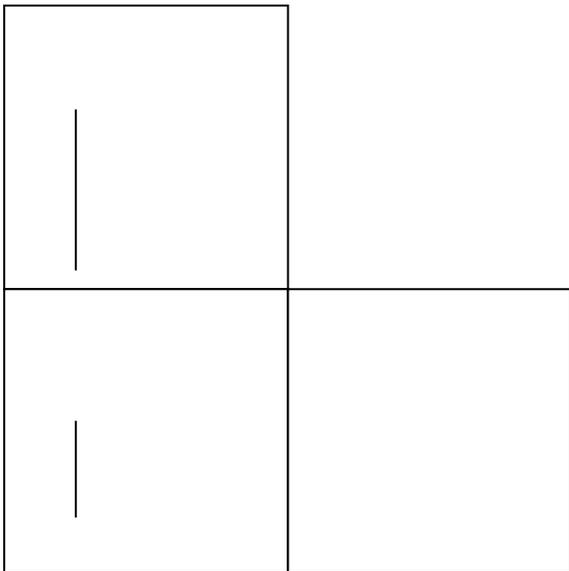
Problem #5



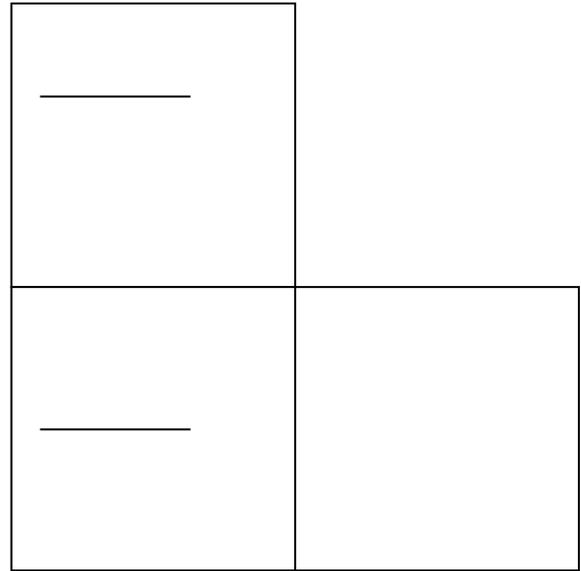
Problem #6



Problem #7

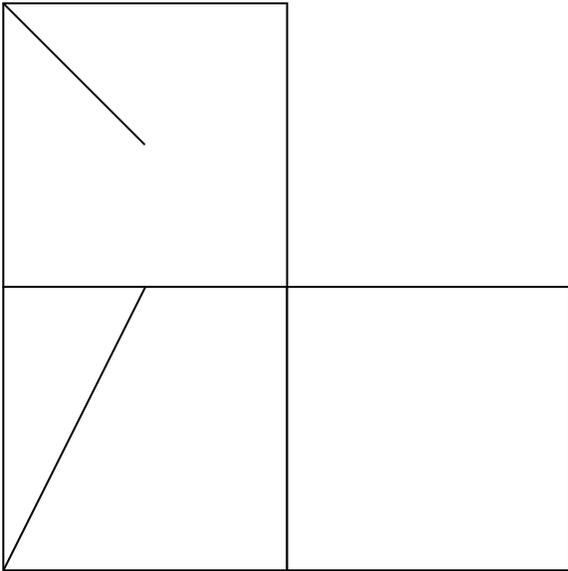


Problem #8

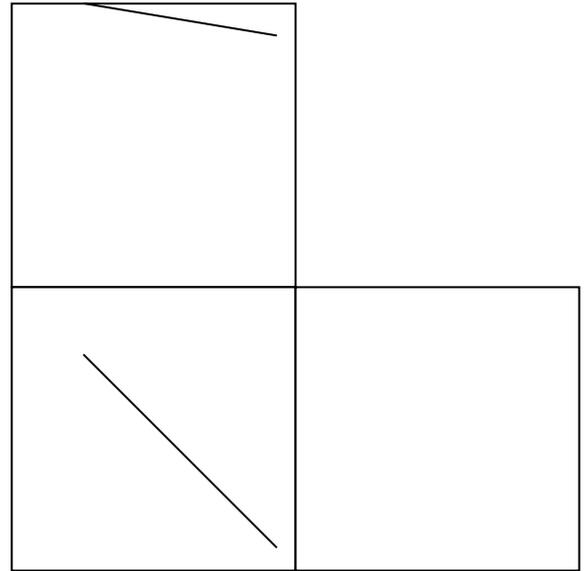


Descriptive Geometry  
**Problem Set A (Cont.)**

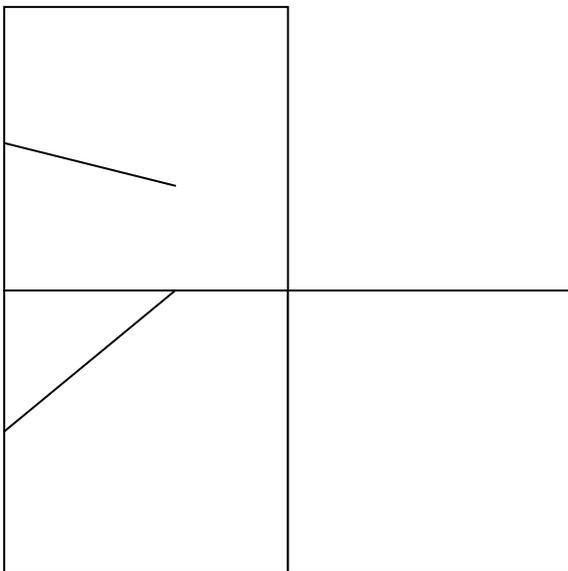
Problem #9



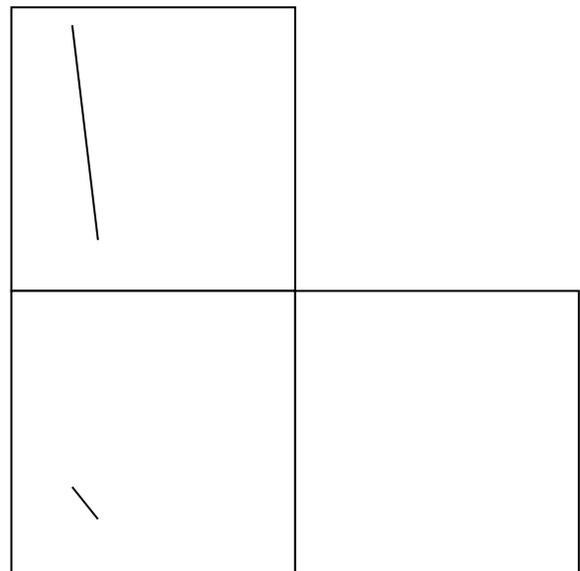
Problem #10



Problem #11



Problem #12



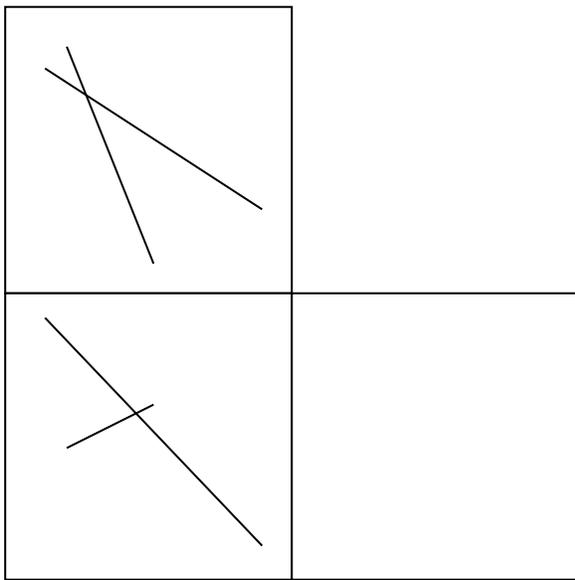
# Descriptive Geometry

## Problem Set B

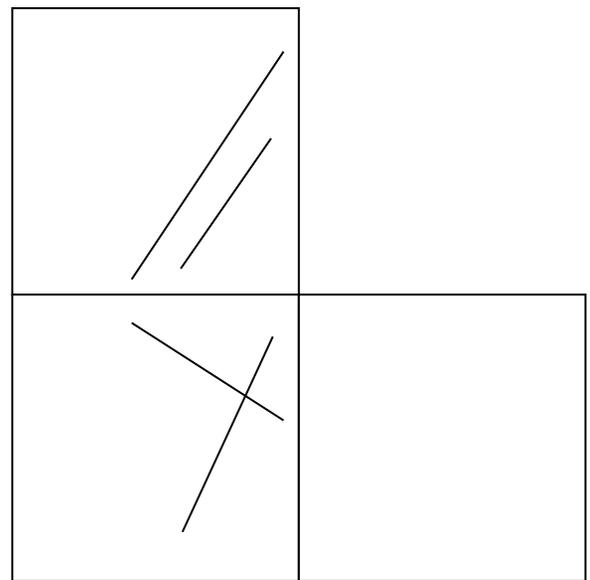
### Instructions:

For each drawing, there are two rods inside a cubic box. You are given two orthographic views: the top view and the front view. First you should try to visualize how the two rods are oriented. (You do not need to describe it.) Then, accurately draw the side view of the two rods. Lastly, with the views where the projections cross one another, determine which rod is in the foreground and which is in the background, and indicate this by going over the two rods with different colored pencils. The rod in the background appears broken. Also go over the rods in the front and top views with colored pencil so that the colors are consistent. E.g. each view should show one green rod and one red rod.

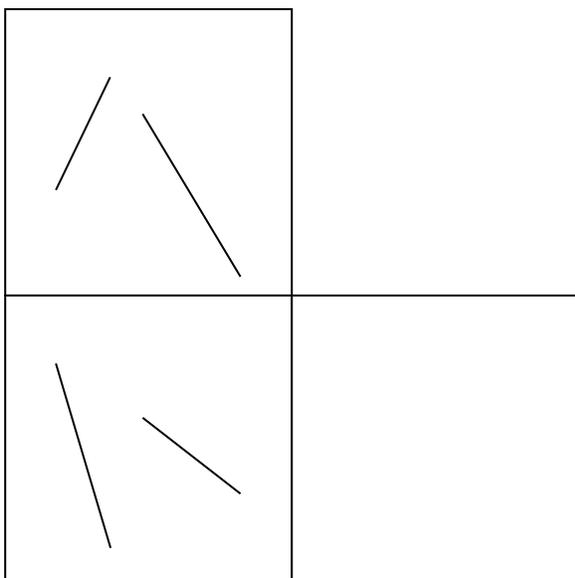
### Problem #1



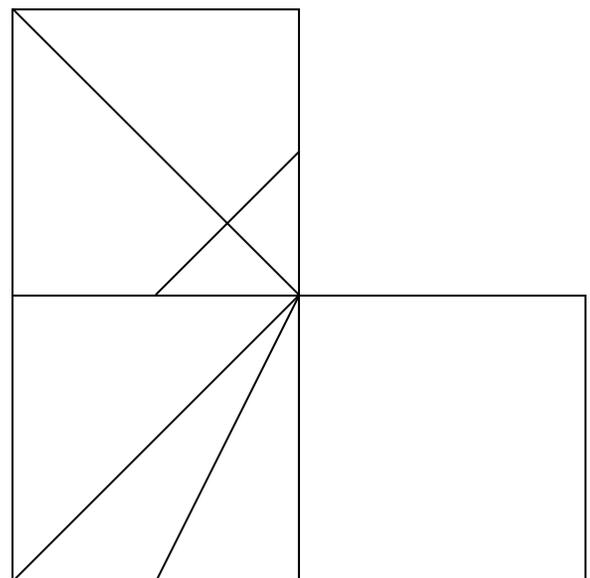
### Problem #2



### Problem #3

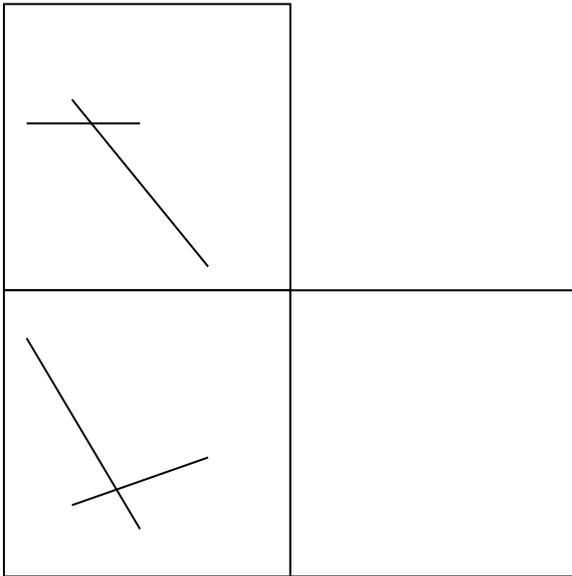


### Problem #4

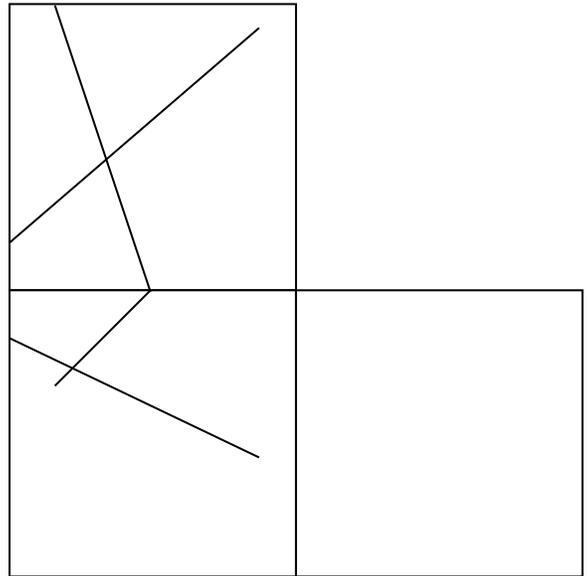


Descriptive Geometry  
**Problem Set B** (Cont.)

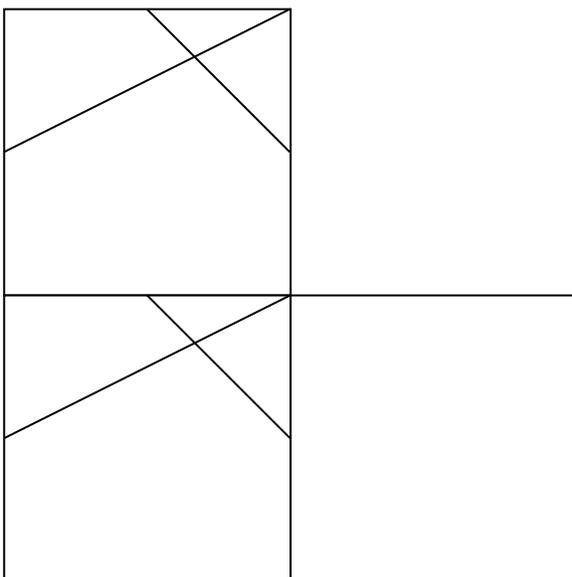
Problem #5



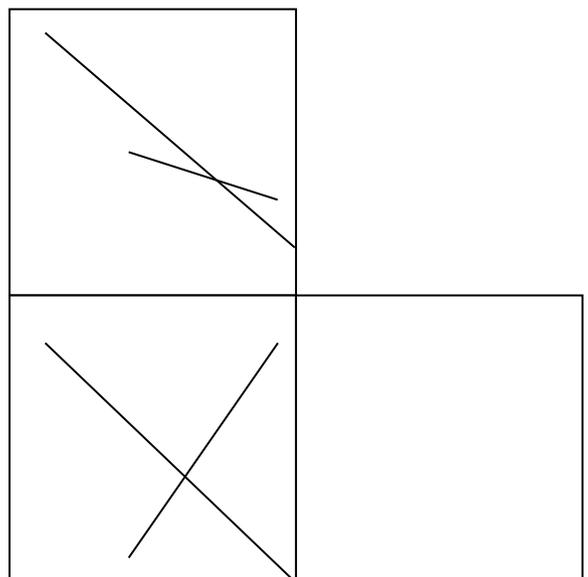
Problem #6



Problem #7



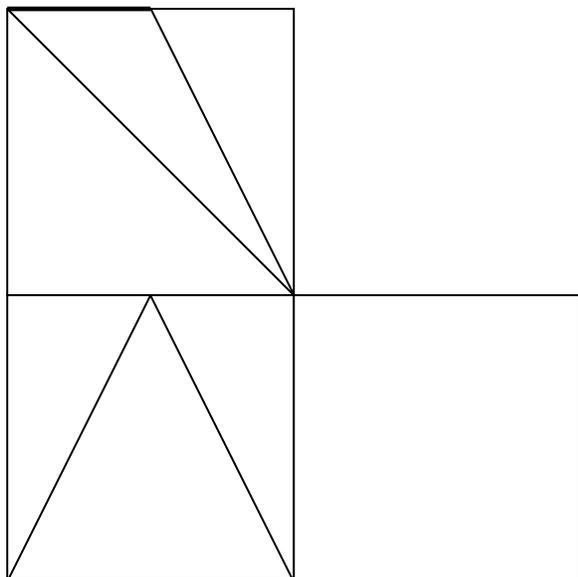
Problem #8



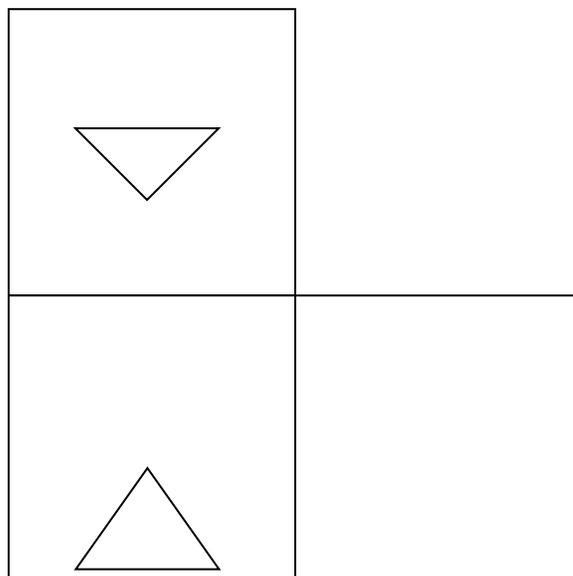
**Descriptive Geometry**  
**Problem Set C**

Instructions: For each problem you are given two views of a figure (mostly a polygon). You need to draw the side view.

Problem #1 (A scalene non-right triangle)

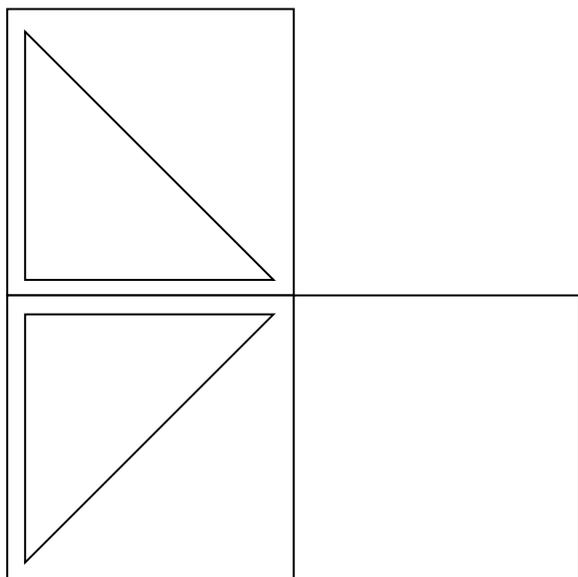


Problem #2 (An equilateral triangle)



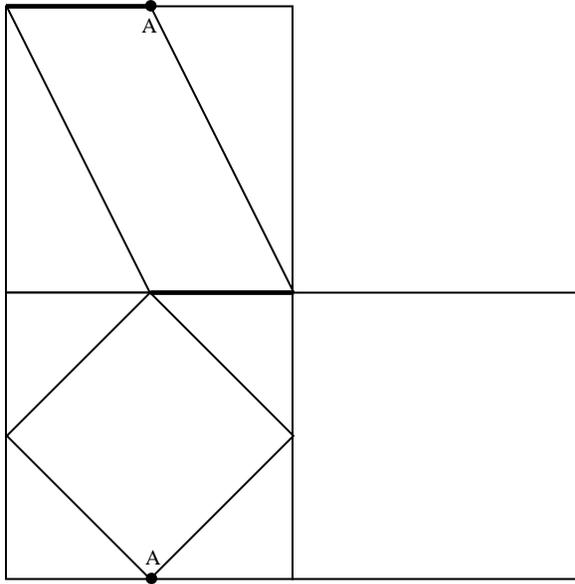
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Problem #3

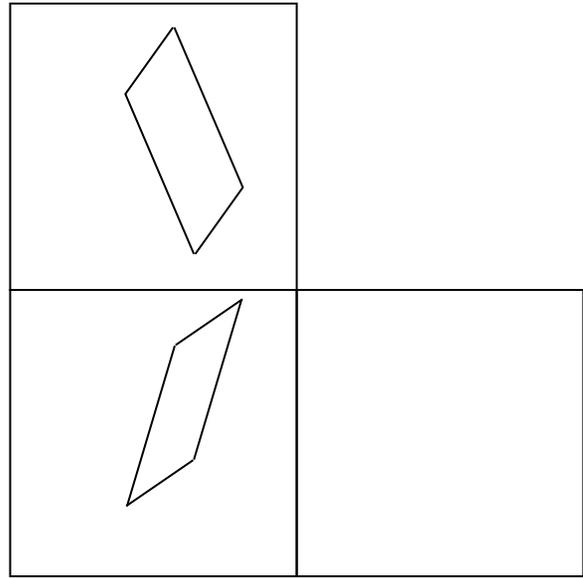


Descriptive Geometry  
**Problem Set C (Cont.)**

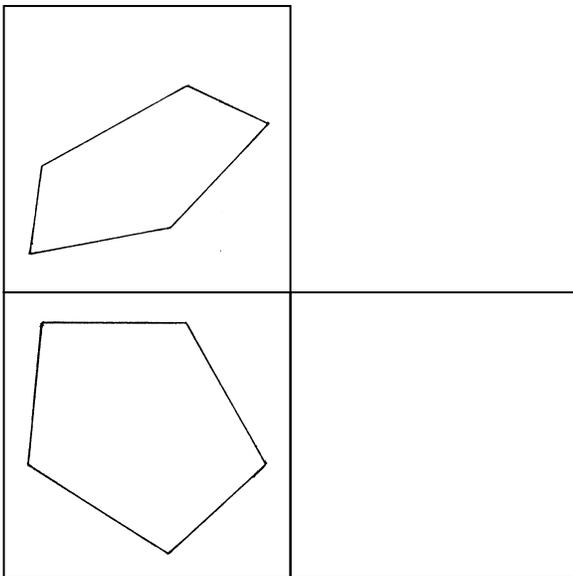
Problem #4 (A rectangle)



Problem #5 (A square)



Problem #6 (A regular pentagon)



Problem #7 (A circle)

