DUE DATE _____ NAME _____

ENGR/DRAFT 105 Assignment #3, Orthographic Projection and Multi-view Drawings

(Note: Use a T-Square and a Triangle to do a "Mechanical Drawing" for all drawings for this assignment)

1) Do exercise 5.2
2) Do exercise 5.3
3) Do exercise 5.4
4) Draw a Mechanical Drawing of a Multi-view sketch of the foam (surfboard material) object on plain 8.5" x 11" paper (ignore imperfections in the object; ignore the whole in the object). Be sure to number all of the points on the object in all 3 views. Be sure to use the same numbering scheme as shown on the part – this will help you to visualize the part better.

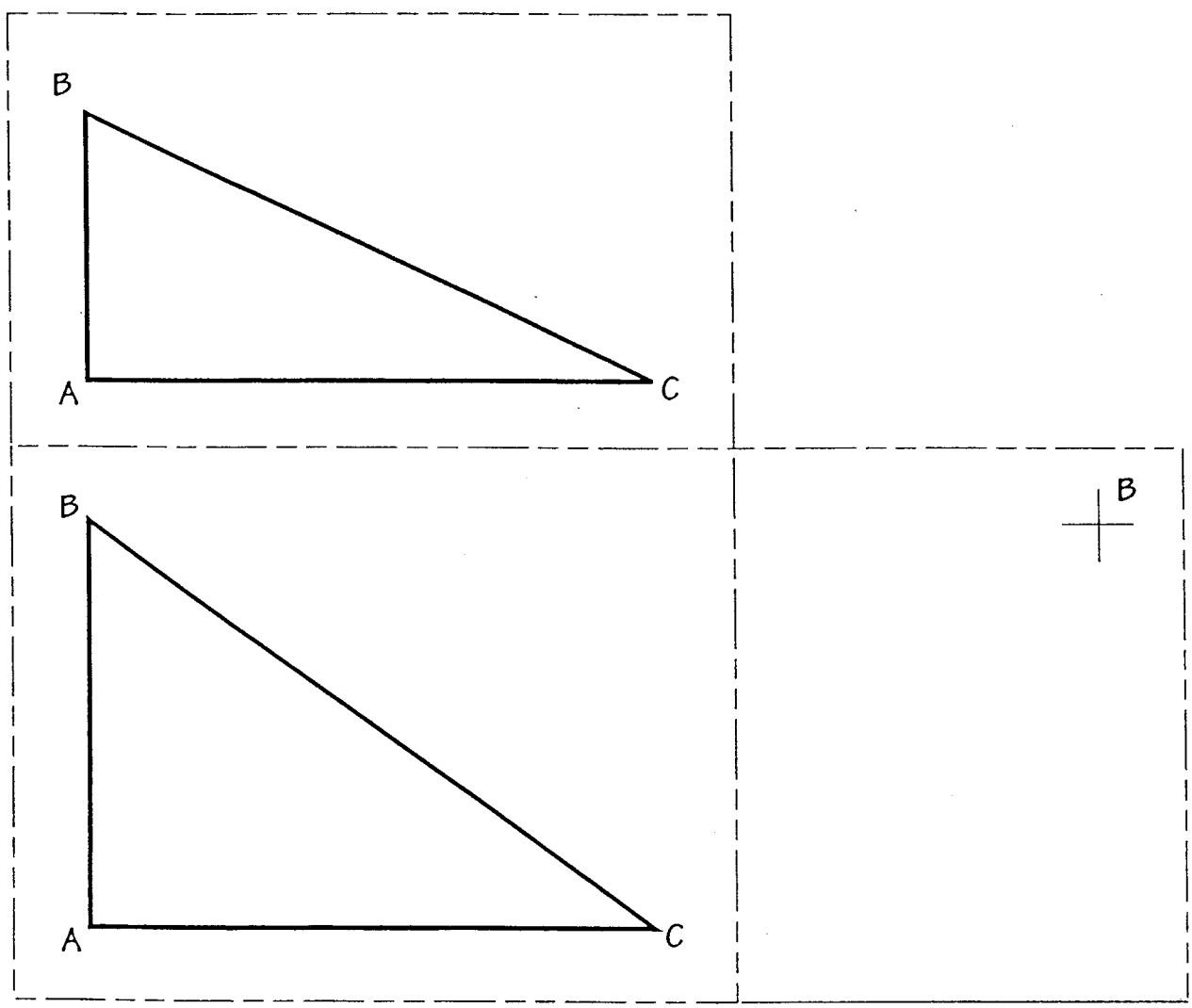
Note: Be sure to use masking or drafting tape. NEVER use scotch taper on the drafting tables – it is next to impossible to remove, and may damage the table in the process.

- **Staple this sheet to the front of your drawings in the correct order.**
- **Write your name at the top of the page.**
- **Write your name on each drawing.**

Worksheet 5.2

Transferring Depth Dimensions

Two views of a triangular plane are shown projected onto the glass box below. Vertex B has already been projected into the side view for you. Finish projecting vertices A & C and draw the side view of the triangular plane. Cut out and fold up the "glass box" to help you visualize how to transfer the vertices to the side view. Cut out a triangular piece of paper the true size of the triangle and orient it inside the "glass box."



Make copies of these pages to use for additional practice.

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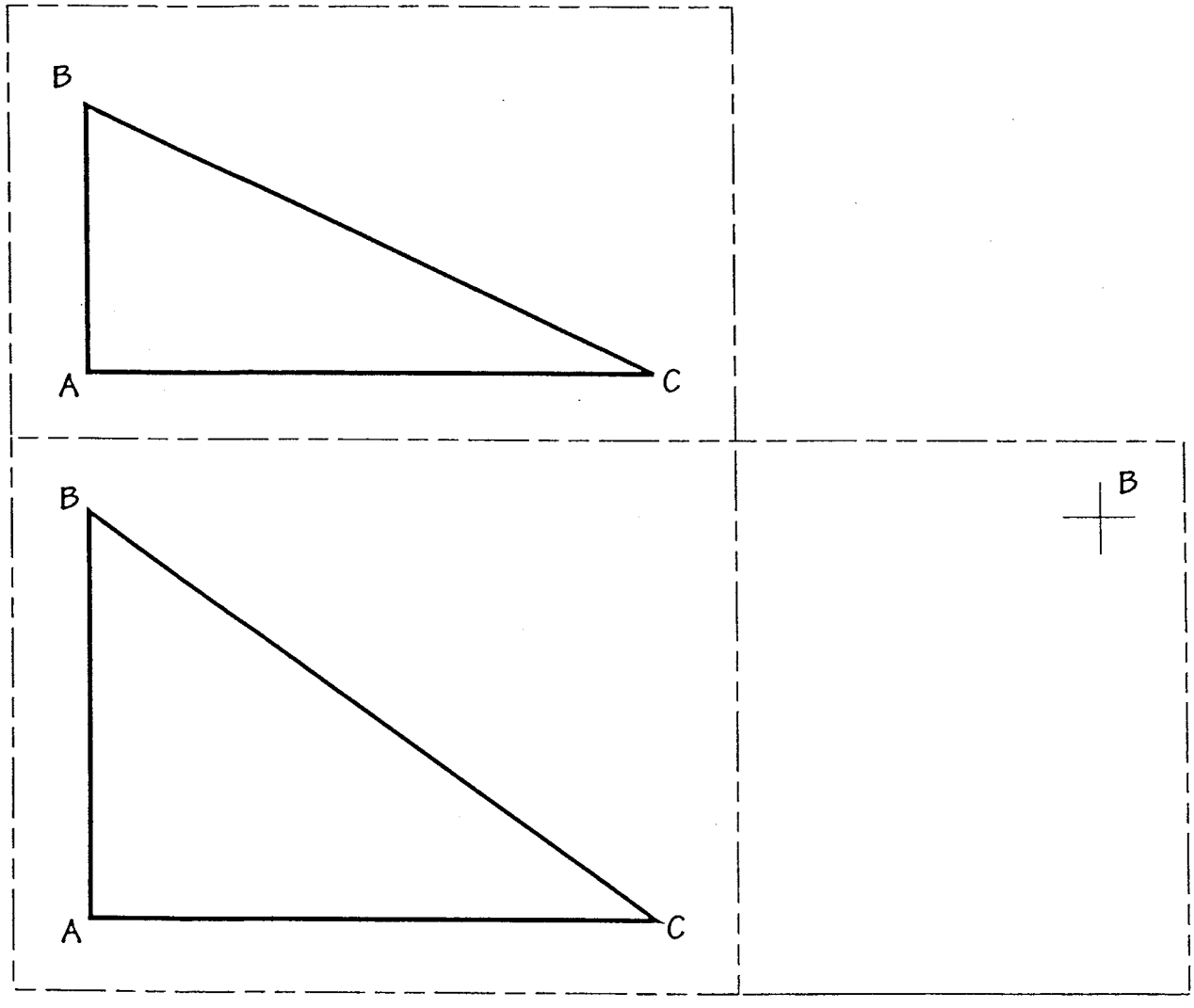

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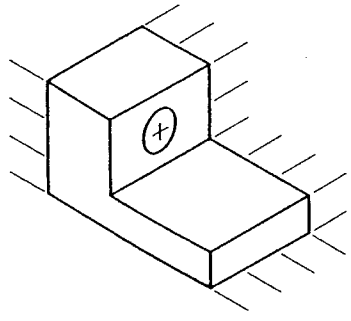
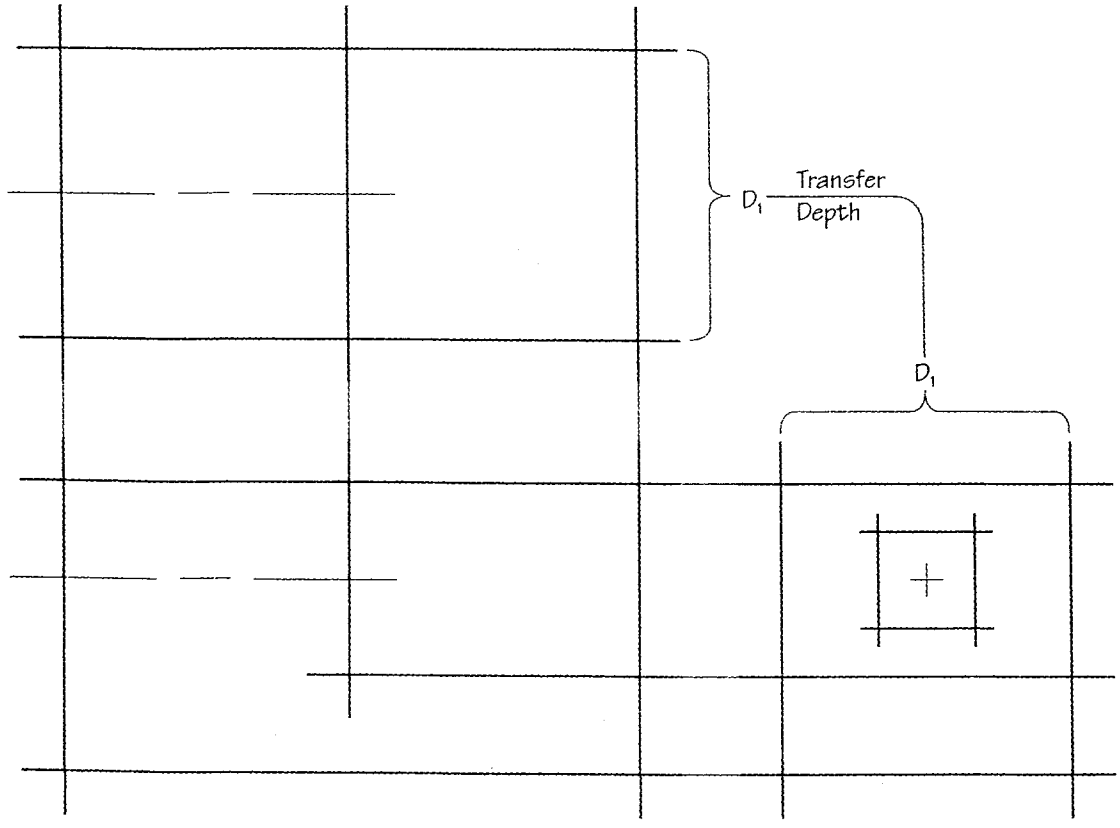
Worksheet 5.3

Blocking a multiview drawing

Construction lines are provided below to help you create the orthographic views of the part shown. Show all features in each view. Darken the final drawing lines.





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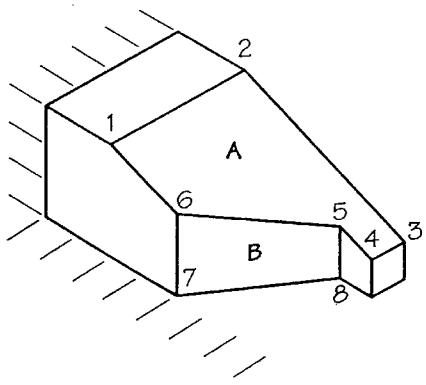
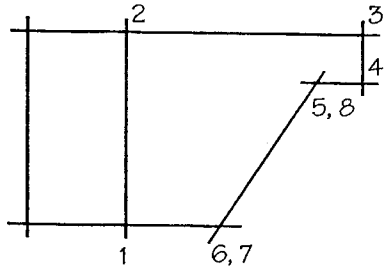
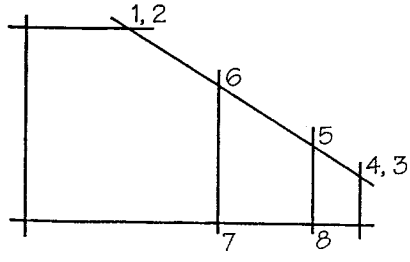
Worksheet 5.4

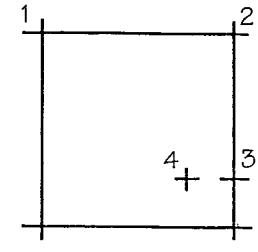
Projecting inclined surfaces

Construction lines have been drawn for you to help you sketch the orthographic views of the block shown. Surface B shows on edge in the top view. Surface A shows on edge in the front view. Finish projecting the points to the side view and complete the drawing.









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