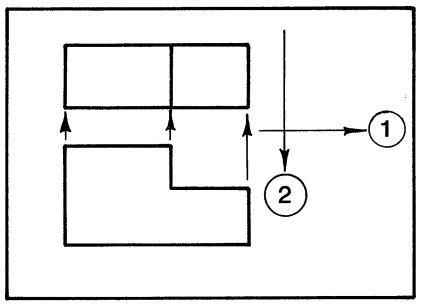
ORTHOGRAPHIC PROJECTION

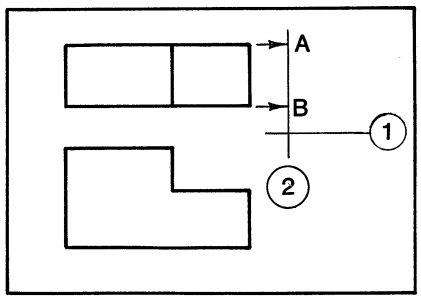
This is a very important lesson in mechanical drawing.

(1)



A. Draw the front view.
B. Project upward from the front view.
C. Measure and draw the top view. (Leave a 1" space between the front view and the top view.)
D. Draw a light horizontal line (1) about 1/2" below the top view. Extend this line to the right as shown.
E. Draw a light vertical line (2) about 1/2" to the right of the top view as shown.

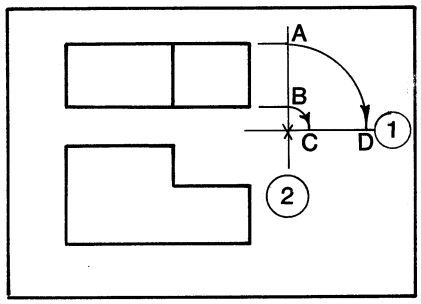
(2)



A. Extend the top horizontal edge of the top view until it touches line (2) at point "A."
B. Extend the bottom horizontal edge of the top view until it touches line (2) at point "B."

Basic Rule: Extend every horizontal line in the top view until it touches line (2).

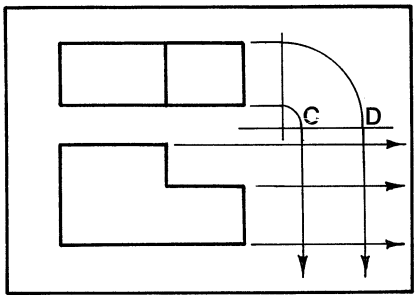
(3)



A. Put your compass needle at the point where lines (1) and (2) cross (marked "X").
B. Open the compass from "X" to "B."
C. Swing arc "BC" until it touches line (1) at "C."
D. Open the compass from "X" to "A." Swing "AD."

Basic Rule: Swing every line that touches line (2) downward until it touches line (1). (Always use "X" as the center.)

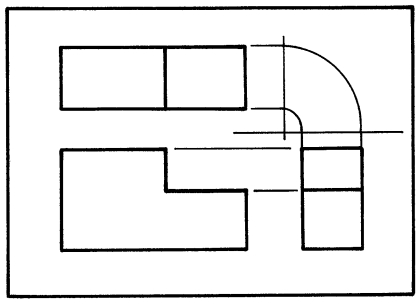
(4)



A. Drop a vertical line downward from "C."
B. Drop a vertical line downward from "D."
C. Extend the three horizontal edges of the front view toward the right as shown. (You can now see the end view.)

Basic Rule: Drop every line that touches line (1) vertically in order to help make the end view.

(5)



DARKEN THE END VIEW

This is the method used by drafters when they wish to make an orthographic projection.

Learn this method . . . thoroughly!

In a short time, this method of projection will become automatic with you.