

3-1

1. Check to see that only the Snap to Node option is set and that running snaps are turned on.
2. Choose the Line tool from the Draw toolbar and draw 3 horizontal lines between each opposing pair of nodes.
3. Click on the top line.
4. Choose the Color Control pop-up button in the Object Properties toolbar and select BLUE.
5. Press the Escape key to deselect the line.
6. Repeat steps 3 - 5 to change the color of the remaining two lines to RED and YELLOW respectively.
7. When finished, set Color Control back to ByLayer.

Note: Lines that have been drawn can be changed to a different color using the Properties tool in the Inquiry toolbar.

3-2

1. Check to see that only the Snap to Node option is set and that running snaps are turned on.
2. Choose the Line tool from the Draw toolbar and draw 3 horizontal lines between each opposing pair of nodes.
3. Choose Other... from the Linetype Control pop-up button in the Object Properties toolbar.
4. Click the Load... button and select the HIDDEN, HIDDEN2, and HIDDENX2 line types. Click the OK button, then click the second OK button.
5. Click on the top line.
6. Choose the Linetype Control pop-up button in the Object Properties toolbar and select HIDDEN2.
7. Press the Escape key to deselect the line.
8. Repeat steps 5 - 7 to change the line type of the remaining two lines to HIDDEN and HIDDENX2.
9. When finished, set Linetype Control back to ByLayer.

Note: Lines that have been drawn can be changed to a different linetype using the Properties tool in the Inquiry toolbar.

3-3

1. Choose the Hatch tool in the Draw toolbar.
2. Click the Pattern button and select the ANSI31 pattern.
3. Click the Pick Points button and click within the main object.
4. When the object is highlighted, press the Enter key.
5. Click the Preview button to see how the object looks with the ANSI31 pattern.
6. After previewing the hatch, press the Enter key.
7. When satisfied, click the OK button to complete the hatch process.

3-4

1. Choose the Ellipse tool in the Draw toolbar.
2. In response to; Specify axis endpoint of ellipse or [Arc/Center]: type C and press the Enter key.
3. In response to; Specify center of ellipse: select the Snap at Intersection tool from the Object Snap toolbar.
4. Click at the intersection of lines AB and CD.
5. In response to; Specify endpoint of axis: select the Snap at Endpoint tool in the Object Snap toolbar.
6. Click on either end of line AB.
7. In response to; Specify distance to other axis or [Rotation]: select the Snap at Endpoint tool in the Object Snap toolbar.
8. Click on either end of line CD.

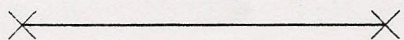
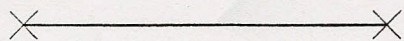
3-5

1. Select the line AB to activate its grips.
2. Choose the List icon on the Inquiry toolbar. Note that the Angle in XY Plane = 13°. Press the Enter key to exit.
3. Choose Drafting Settings from the Tools Menu (Tools>Drafting Settings). When the Drafting Settings dialog box appears, click on the Snap and Grid tab.
4. Set the snap angle to 58 (13°+45°).
5. Click OK to exit the dialog box. Notice that the cursor is now tilted at a 58° angle.
6. Turn on ORTHO.
7. Choose the Line icon in the Draw toolbar.
8. Choose the Snap to Endpoint icon in the Object Snap toolbar.
9. Click on the A end of line AB.
10. Drag the line upward and to the right and click.
11. Exit the command.
12. Set the grid angle back to zero (0) before proceeding.

3-6

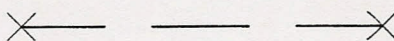
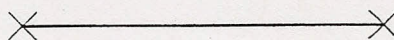
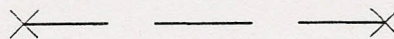
1. Turn off ORTHO.
2. Right click the OSNAP button and choose settings, then enable only Snap to Endpoint.
3. Select lines 3, 4, and 5, then choose the Explode icon in the Modify toolbar.
4. Choose the Rotate icon in the Modify toolbar, then select line 3.
5. Snap to the left end of line 3 for a base point.
6. Type 90, and press the Enter key to rotate the line.
7. Choose the Move icon in the Modify toolbar, then reselect line 3.
8. Snap to the lower end of line 3 to the left end of line 4.
9. Select line 5 and click its left grip to make it hot, then press the spacebar to enable the Move option.
10. Drag and snap line 5 to the upper end of line 3.
11. Make the grip on the right end of line 5 hot and snap it to the right end of line 4.
12. Move the numbers outside the triangle near the center of their respective lines.

3-1



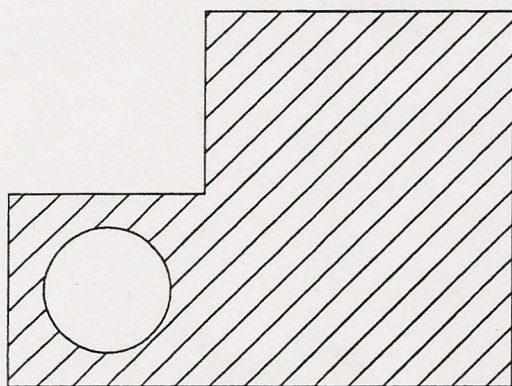
Draw a horizontal blue, red, and yellow line between the points.

3-2



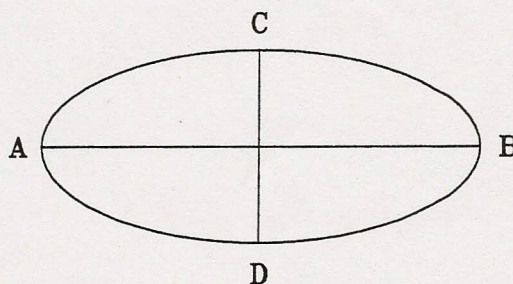
Draw a horizontal HIDDEN2, HIDDEN, and HIDDENX2 line between the points.

3-3



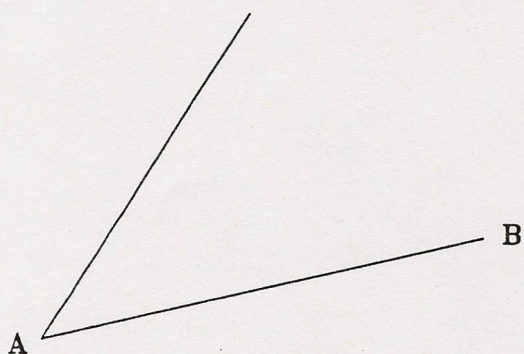
Hatch the above object using ANSI31.

3-4



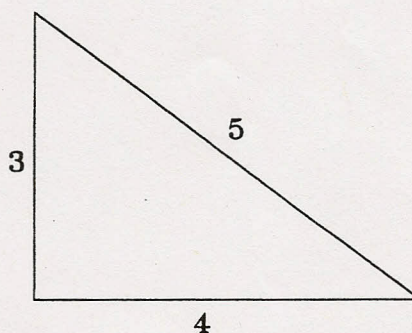
Draw an ellipse to fit the axes AB, CD.

3-5



Draw a line from point A that forms an angle of 45° with line AB.

3-6



Draw a right triangle using lines 3, 4, and 5. Do not move line 4.