CAD notes

Give a definition for each short cut and a description of what it does.

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19 | Linear

20 | Aligned

20

Arc Length

Ordinate

Radius

Jogged

Diameter

Angular

21

Baseline

Continue

Leader

Tolerance...

Center Mark

Oblique

Align Text

22 | Dimension Style...

Override

Update

Reassociate Dimensions

2

3

4

5

6

SNAP | GRID | ORTHO | POLAR | OSNAP | OTRACK | DYN | LWT | MODEL

23   24   25   26   27   28
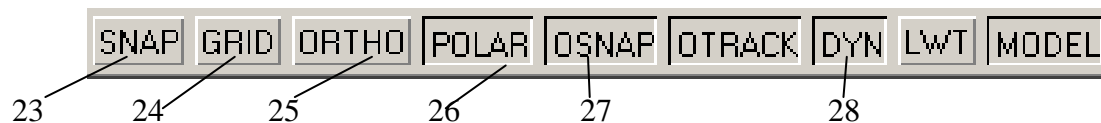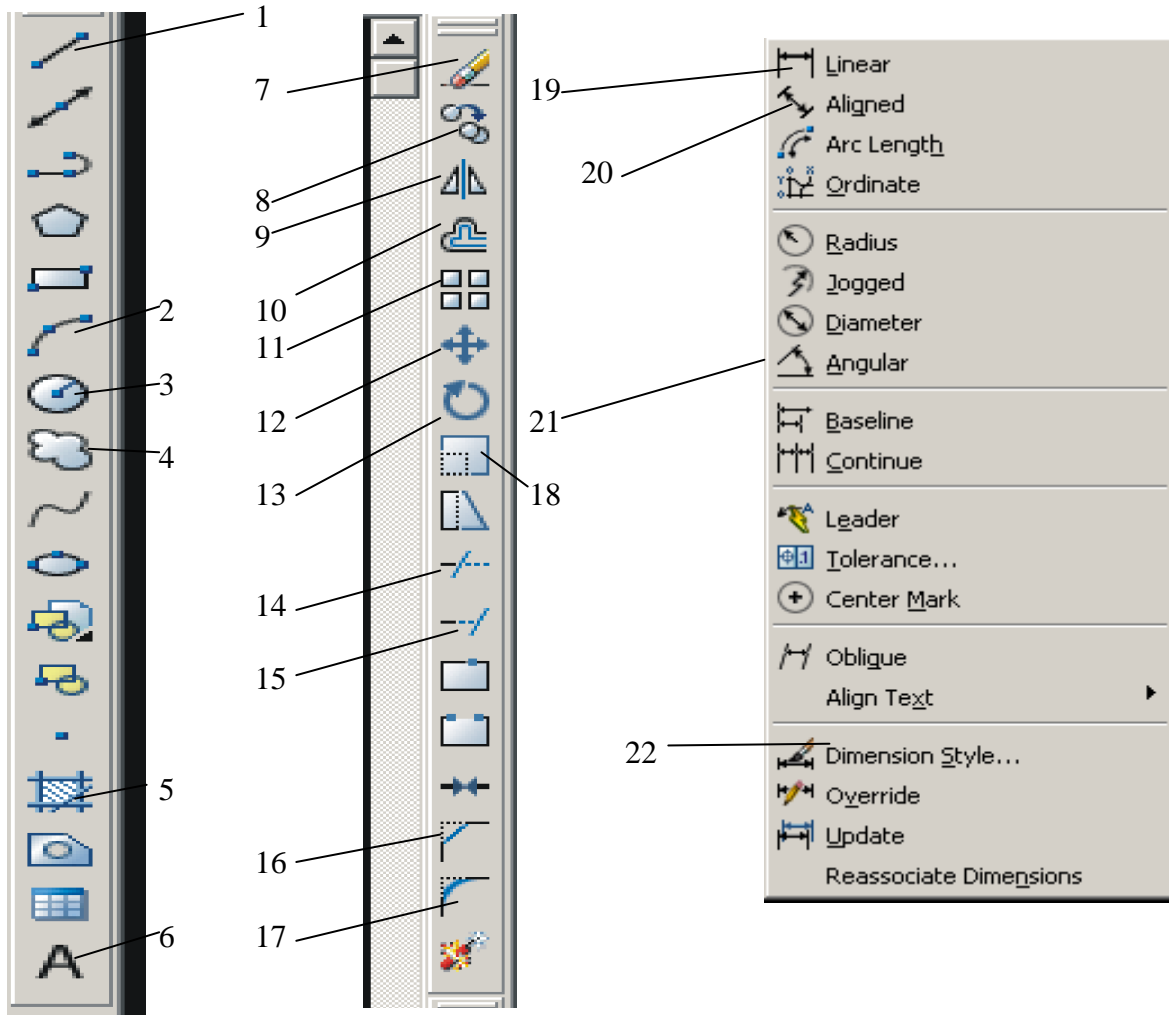
CAD = COMPUTER AIDED DRAFTING

1. _____: Most commonly used command in AutoCAD
There are several different ways to start the line command: you can set co-ordinate or just click away. You must first specify load line type as required. Thickness new 2007, Show Hidden.

      i) Hit the shortcut button.
      ii)Type line on the command prompt and then hit enter.
      iii)Type L on the command prompt and then hit enter.
      iv) If line was your last command hit the enter key.
      v) If line command was your last command hit spacebar.
      vi)If line was your last command right click on mouse.
      vii)Use the drop down command (Draw Line)

2.___ command there are THREE points in arc beginning middle and end (remember middle).

3. Circle command, after clicking the shortcut or typing 'circle' in command prompt, your first click afterwards is-the center point. You then set diameter or radius which ever you want. (Watch display).
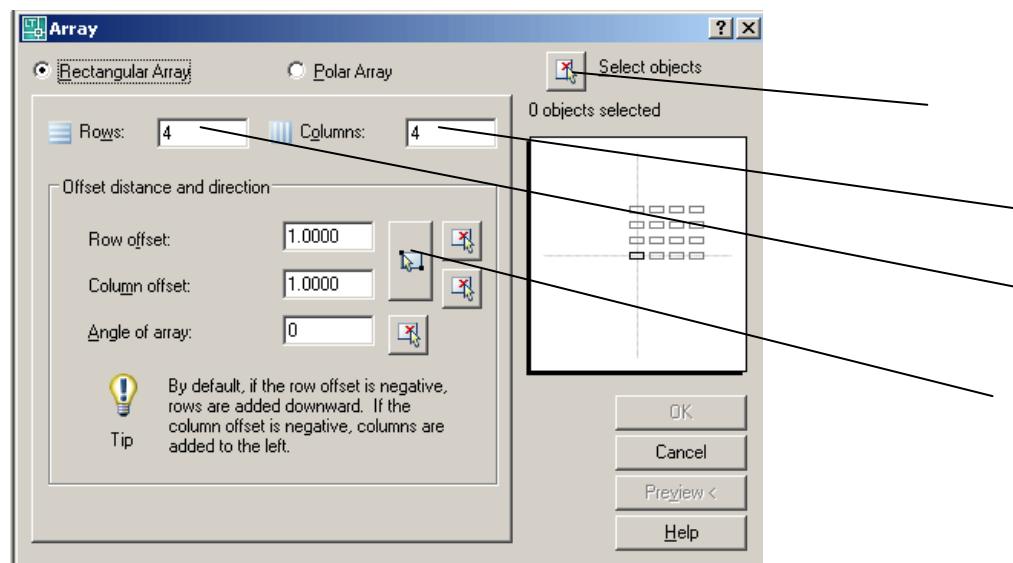
4. Revision circle:

5. _____ key command to fill in **SEALED AREAS!!!**. You can enter solid colors or you can put in brick concrete etc.
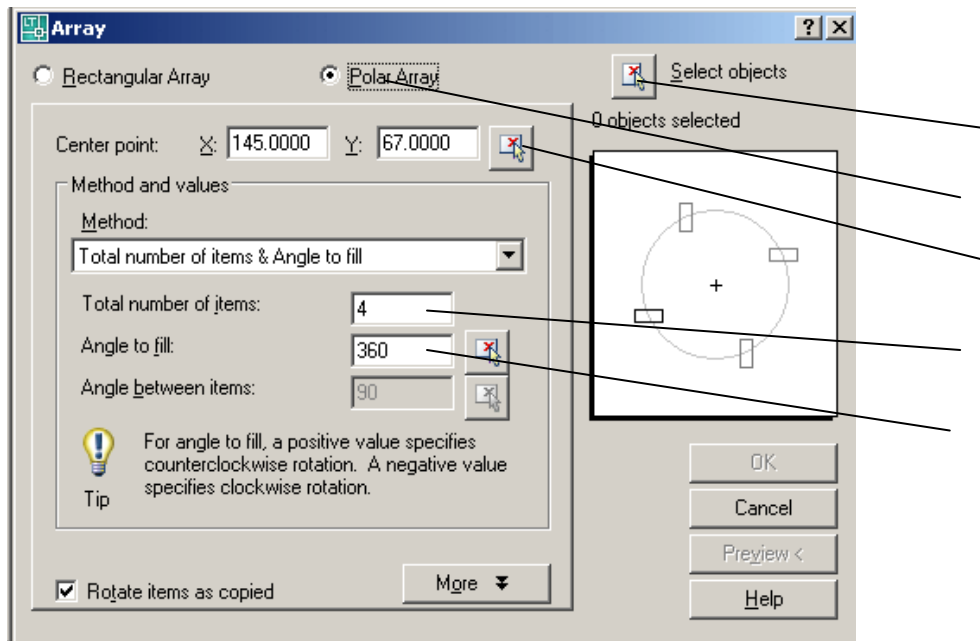
6.text shortcut and text command. Remember Height and starting point.

7.Erase tool.

8.Copy tool, important to know how to use the multiple copy tool (used in industry).

9.Mirror command. Mirror selected object across specified line.

Array dialog box
- Rectangular Array ○
- Polar Array ●
- Select objects
- 0 objects selected
- Center point: X: 145.0000 Y: 67.0000
- Method and values
  - Method: Total number of items & Angle to fill
  - Total number of items: 4
  - Angle to fill: 360
  - Angle between items: 90
  - Tip: For angle to fill, a positive value specifies counterclockwise rotation. A negative value specifies clockwise rotation.
- ☑ Rotate items as copied
- More ▼
- OK
- Cancel
- Preview <
- Help

10. _____. Copy's a specified object a specified distance away.

11. Array command Polar and rectangular, important to know how to do both!!!!!!

12. Move: Moves selected objects. You must press enter after you have selected all the objects you want even if you 'select all'.

13. Rotate to rotate objects.

14. _____. First specify cutting edge, then press enter. Afterwards press the line that you want to cut, as you hit the line it will trim. Know how to use trim with 2 boundary edges.
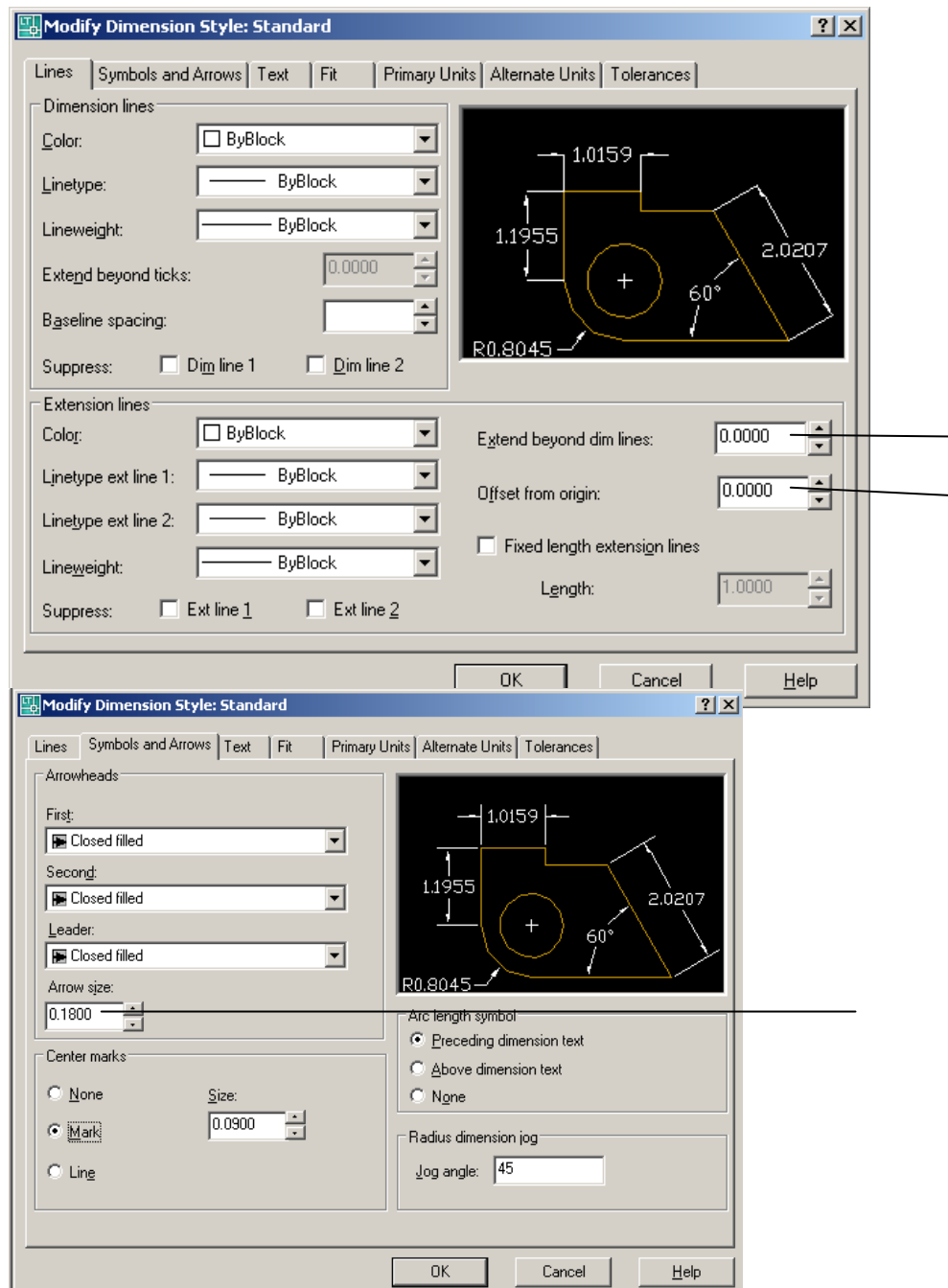
15. _____. Select your boundary edge first, you can select 2 boundaries then click the line that you want to extend if you have selected 2 boundary edges choose carefully.
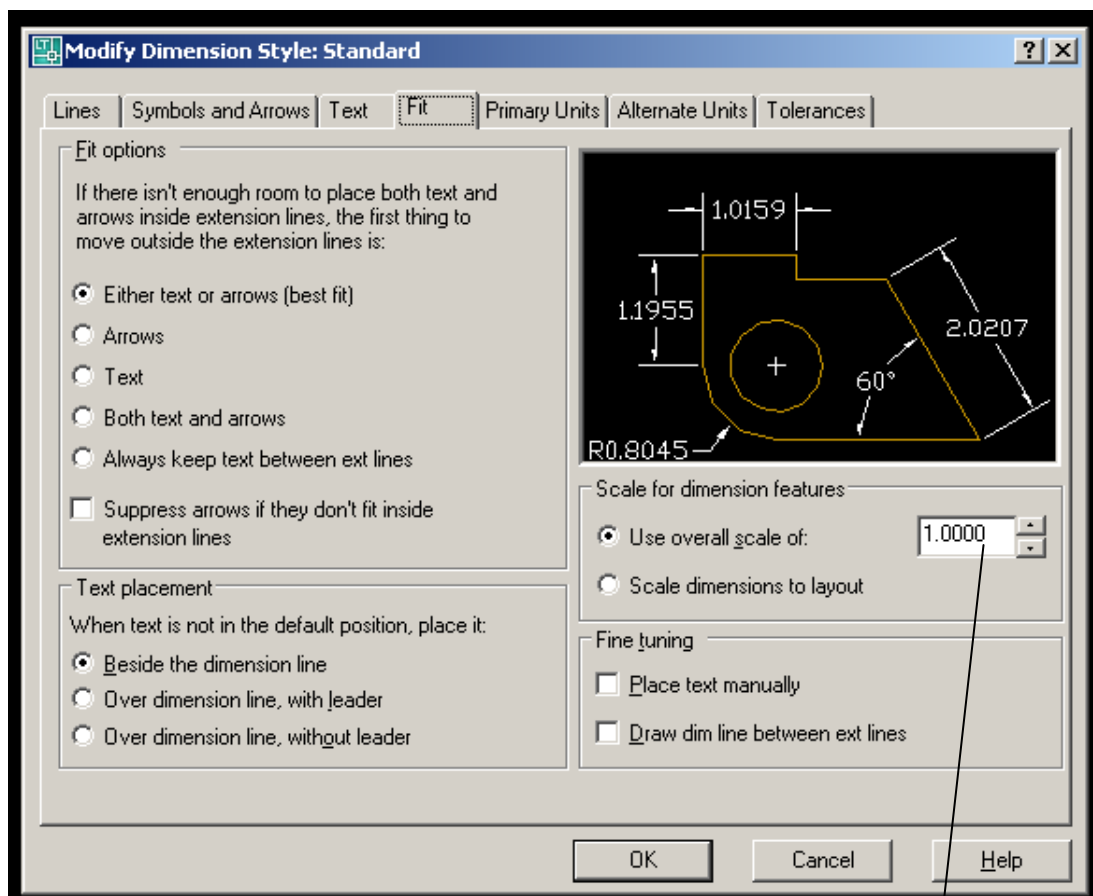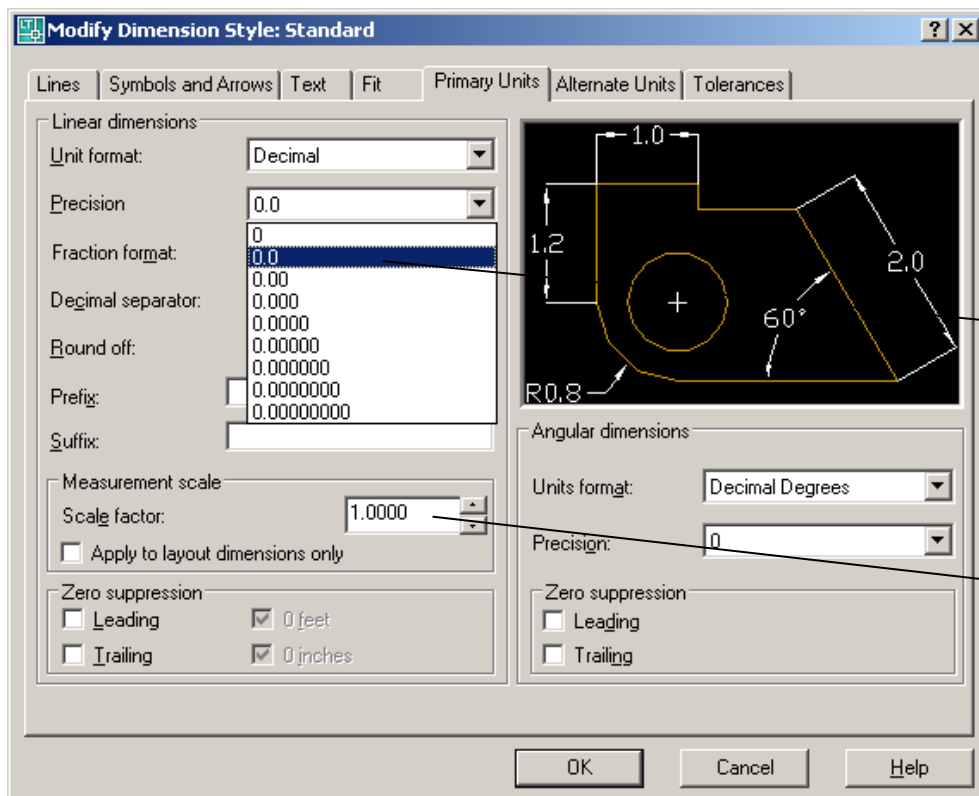
16. _____, you can select the 2 different chamfer lengths, if they are both the same then the corner will have a 45 degree angle. (Choose distance)

17. _____, use this command to round corners a fillet with a radius of 10 would line up with a circle that had a radius of 10 exactly.

18. _____ command: use this command to make objects, bigger or smaller. First select object that you want to change the size of, then press enter when the selection is complete. Next put in your scale factor. O.5 would be ½ the size and 1.75 would be 75% larger. The command prompt will ask you specify base point. This is the point that you want remain in place.

19. _____ dimension: This will give the dimension of the points you pick at 90, 180, 270 and 360 degrees Only. Not necessarily along the line.

20. _____ Dimension: This is the dimension used most in the course. It will measure the shortest distance between the points that you select.

21. _____ dimension: This will give the measured angle between the 2 lines you select.

22. Dimension style. Scale factor can be used (primary units).

Modify Dimension Style: Standard

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Linear dimensions
Unit format: Decimal
Precision: 0.0

0
0.0
0.00
0.000
0.0000
0.00000
0.000000
0.0000000
0.00000000

Fraction format:
Decimal separator:
Round off:
Prefix:
Suffix:

Measurement scale
Scale factor: 1.0000
☐ Apply to layout dimensions only

Zero suppression
☐ Leading   ☑ 0 feet
☐ Trailing ☑ 0 inches

Angular dimensions
Units format: Decimal Degrees
Precision: 0

Zero suppression
☐ Leading
☐ Trailing

OK | Cancel | Help

Modify Dimension Style: Standard

Lines | Symbols and Arrows | Text | Fit | Primary Units | Alternate Units | Tolerances

Fit options
If there isn't enough room to place both text and arrows inside extension lines, the first thing to move outside the extension lines is:
⦿ Either text or arrows (best fit)
○ Arrows
○ Text
○ Both text and arrows
○ Always keep text between ext lines
☐ Suppress arrows if they don't fit inside extension lines

Text placement
When text is not in the default position, place it:
⦿ Beside the dimension line
○ Over dimension line, with leader
○ Over dimension line, without leader

Scale for dimension features
⦿ Use overall scale of: 1.0000
○ Scale dimensions to layout

Fine tuning
☐ Place text manually
☐ Draw dim line between ext lines

OK | Cancel | Help

23. Snap is used to snap to the background grid so that everything is spaced properly. Snap can be set but should somewhat match the grid.

24. Grid is used for setting up a pattern in the background to snap to.

Layers ☒

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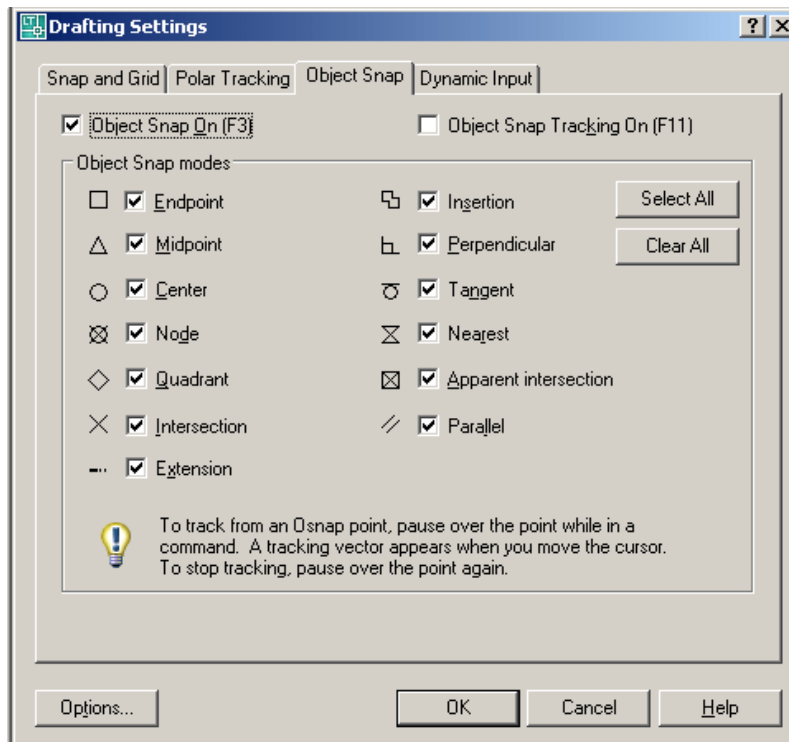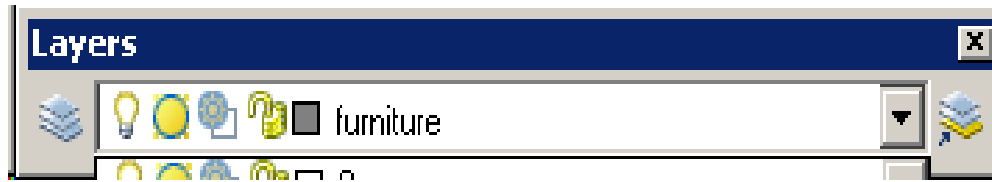
25. Ortho is used to draw objects at 90, 180, 270 and 360 degrees Only you can not draw on any other objects.It can not be used at the same time that Polar is used.

26. Polar: This command is used to set angle snap lines, if you set your polar to 30 degrees then every 30 degrees a line will snap to show that you are on a 30 degree angle. It can not be used at the same time that Ortho is used.

27. OSNAP is used to snap objects to certain points. This feature can be turned on and off.

28. DYN (Dynamic Input) is used so that you can see your prompt on screen ie)not at the command prompt.

29. Layers in AutoCAD DEMO

30.EXPLODE feature used on Blocks.

31. Tips and tricks (LEFT DRAG VS RIGHT DRAG) Do your template first (making sure dimensions are to proper scale).

32. Hidden lines. Use Line types and Global scale factor.