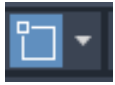


UNIT 1– BASIC SETTINGS IN AUTOCAD 2020

Objectives: At the end of this unit, you will be able to:

- ❶ Launch AutoCAD 2020 efficiently
- ❷ Draw productively using basic settings to the drawing

1. Set Status Toolbar at bottom:

- a) Activate or **turn on (Blue) Snap, Grids & Object Snap** icons ,
- b) **Check Endpoint, Midpoint, Center, Quadrant, Intersection, Extension, Perpendicular & Nearest in Object Snap** icon ,
- c) **The rest of icons shall be turned-off (Grey).**

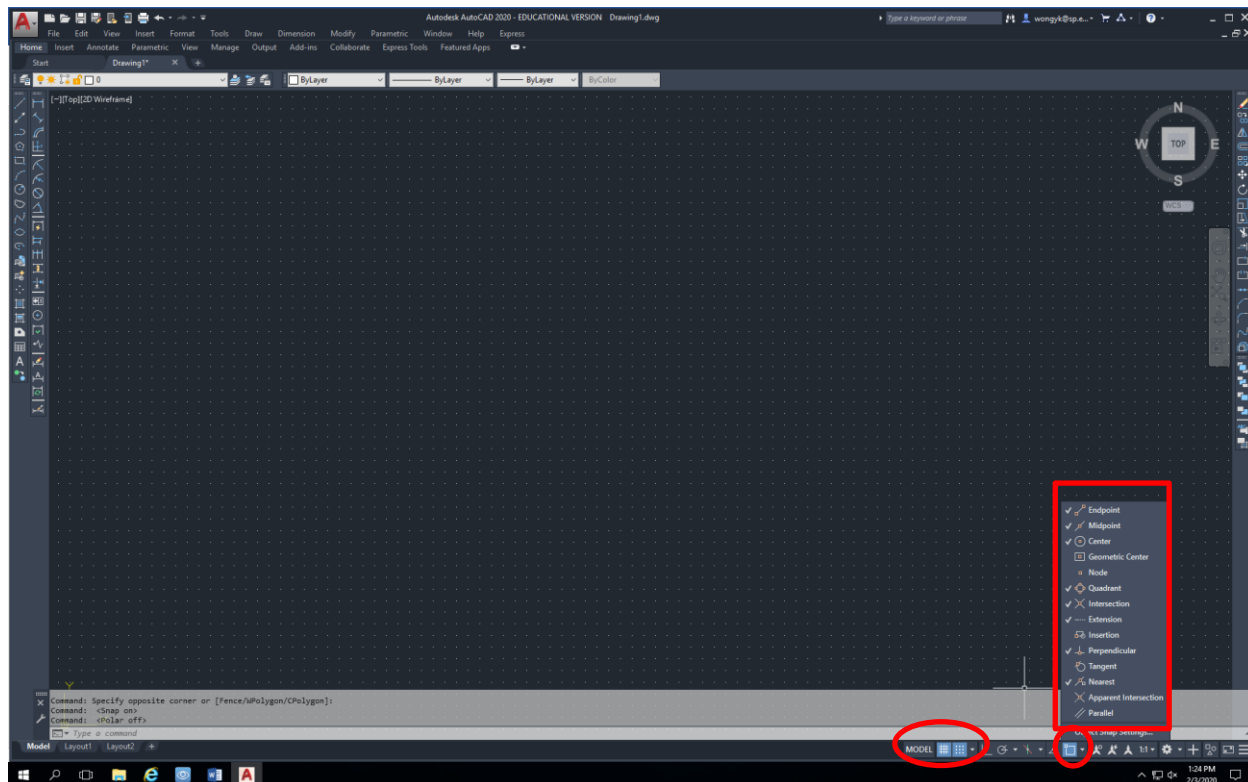


Figure 1-1: Activate Snap, Grid, Object Snap in Status Toolbar

2. Set Grid & Snap Spacing & Uncheck all boxes in grid behaviour

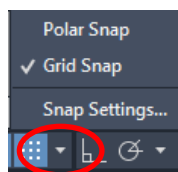


Figure 1-2:

Click on the **Snap** icon pull-down arrow & click **Snap Settings**

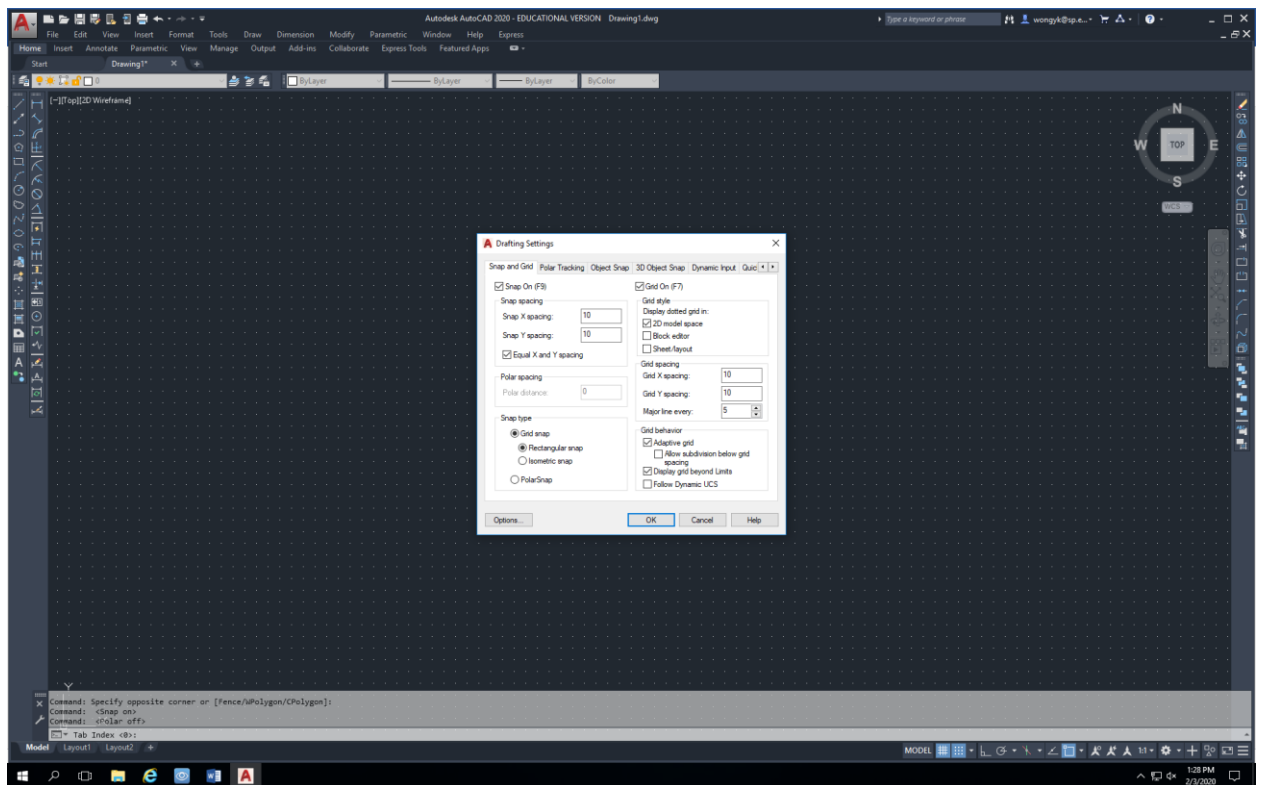


Figure 1-3:
Drafting Settings dialog box appears and change the settings according to the next figure.

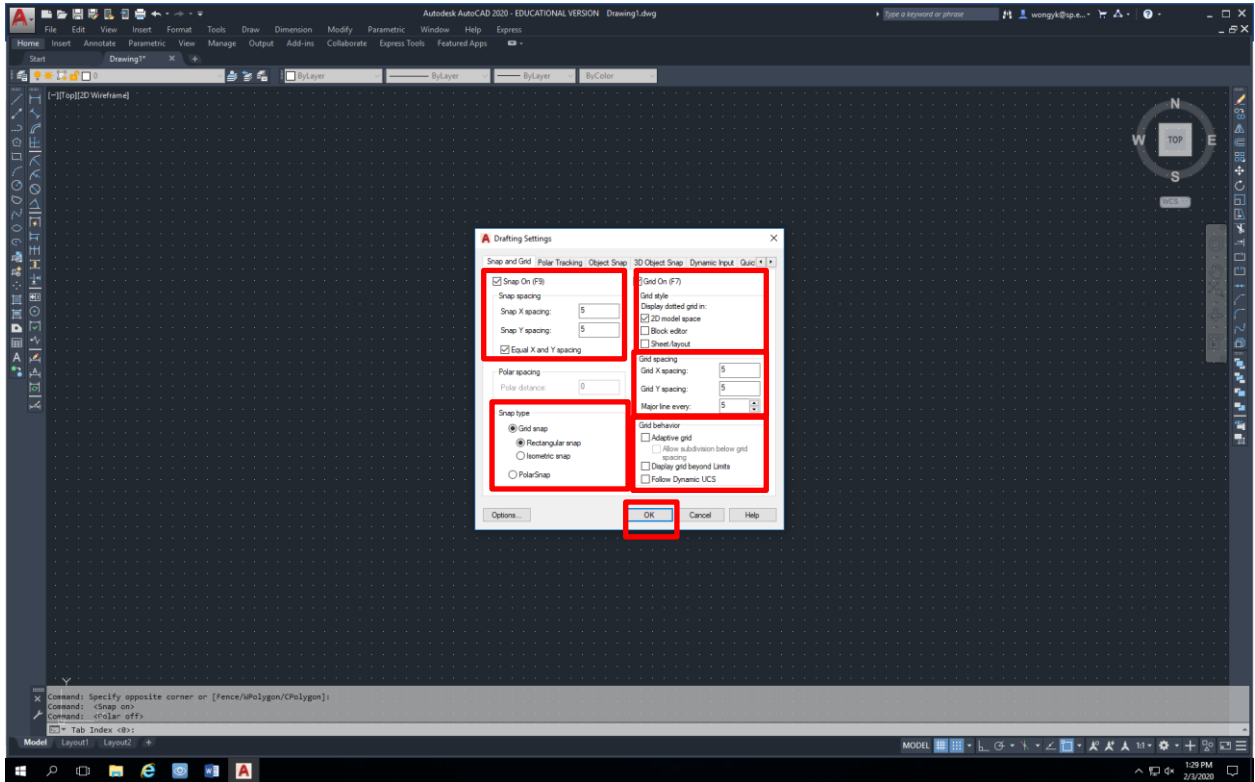


Figure 1-4:

Snap & Grid Tab:

- i) Change X & Y Snap Spacing & Grid Spacing to 5mm
- ii) **Uncheck** all boxes in **Grid behaviour**
- iii) Check **2D model space** in **Grid style**
- iv) Click **Ok** after completing the above setting.
- v) Under command, key: **zoom**
- vi) And key: **All**

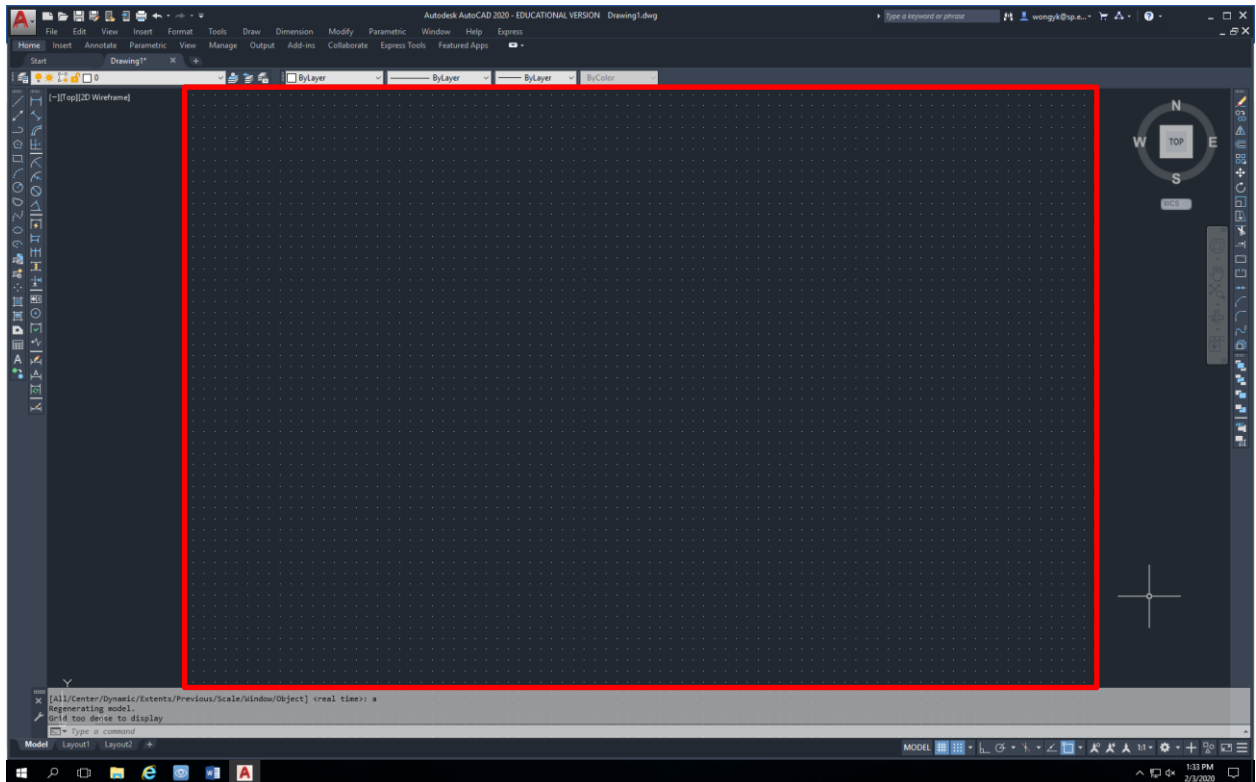


Figure 1-5:

You should be able to see grids & snap spacing of 5mm in a default A3 size paper: 420mm x 297mm as shown above.

3. Instead of the default A3 size paper, other sizes can also be set using the command **Limits** as show below:

Set paper size, E.g. 250,250

- i) Command: **Limits**
- ii) Lower left corner: **0,0**
- iii) Upper Right corner: **250,250**
- iv) Command: **zoom**
- v) Type: **All**

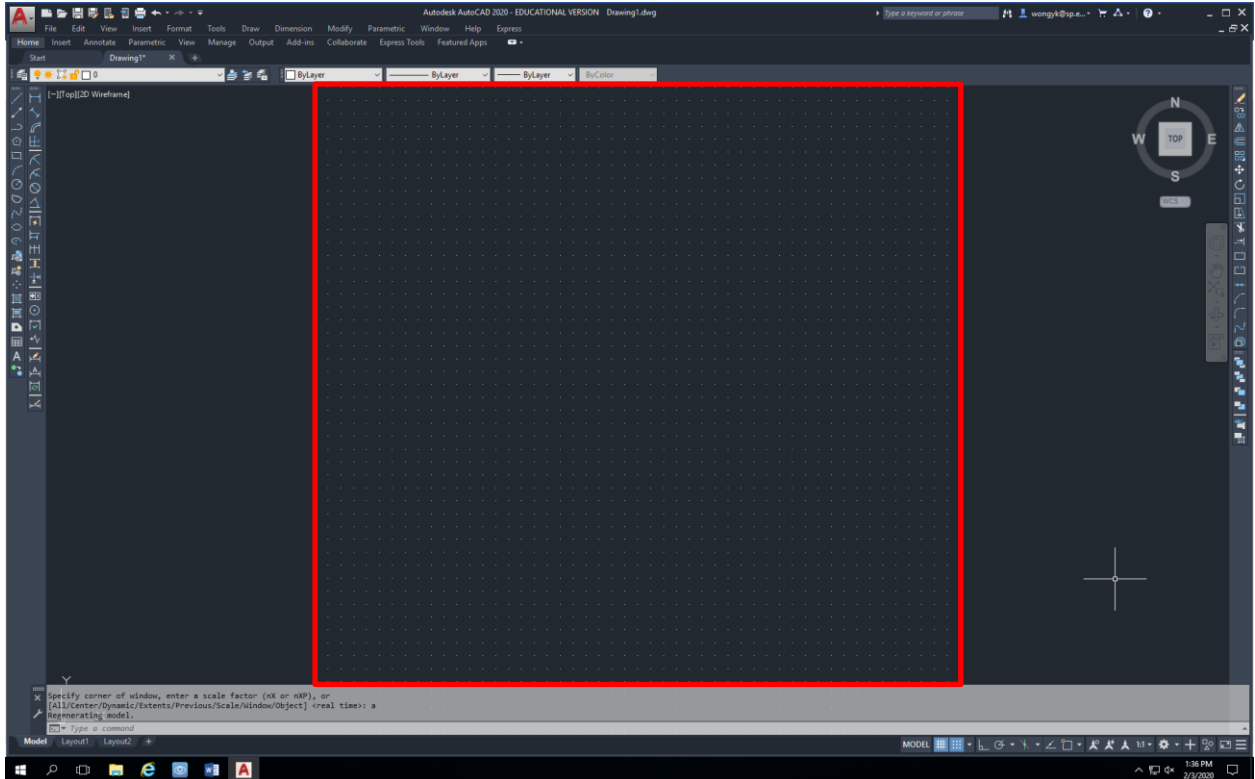


Figure 1-6:

The setting of Limits for the drawing space is 250mm x 250mm

4. Set Text: Setting Text to Times New Roman from default Standard Fonts:

Format→Text Style→

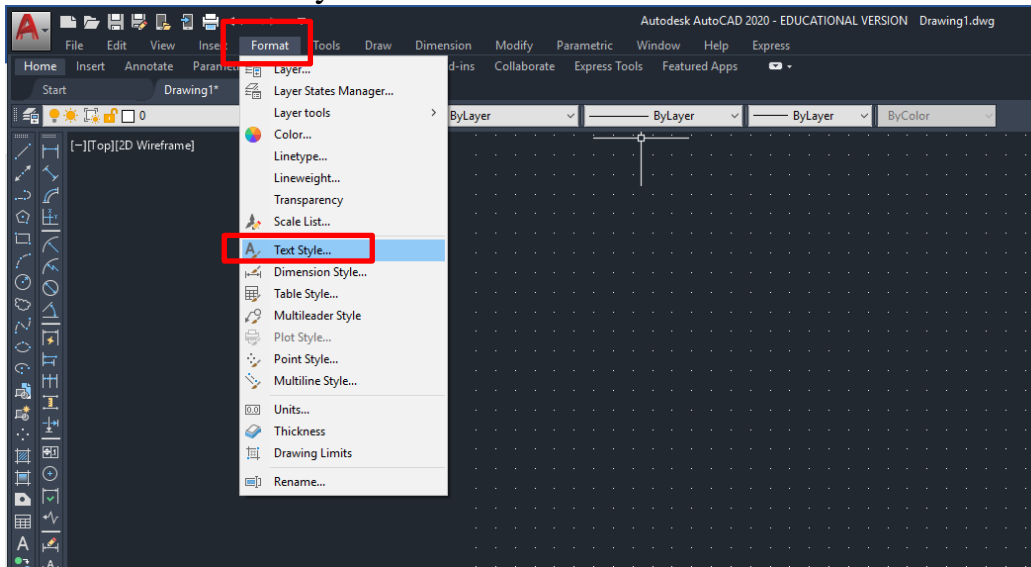


Figure 1-6:

Change Fonts→Times New Roman→ New

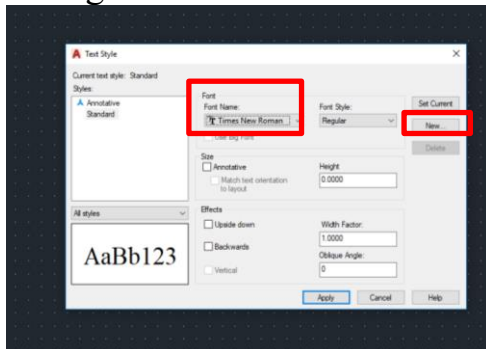


Figure 1-6A

Click Yes
OK

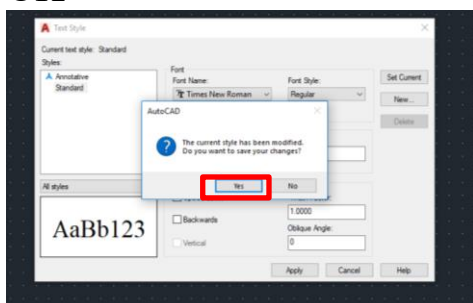


Figure 1-6B

Type Style Name: TNR & click

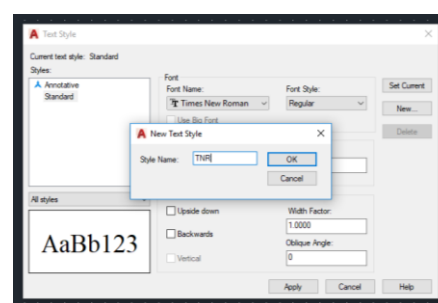


Fig 1-6C

The alphabets will be changed to Times New Roman font.

- 5. Set Dimension Scale:** Dimension Scale is used to change the overall scale of default dimensions which is 1.

Command: dimscales

Type: 1.5

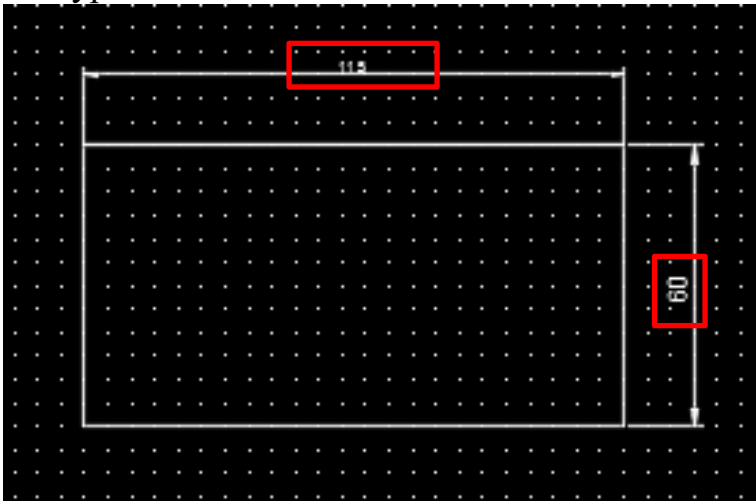


Figure 1-7:

Dimension 60mm is scaled 1.5
Dimension 115mm is scaled 1.0

- 6. Set Dimension Style:** To change Text placement, Text Alignment, Primary Units, Decimal Separator, Decimal Precision, etc.
Format → Dimension Style → Modify

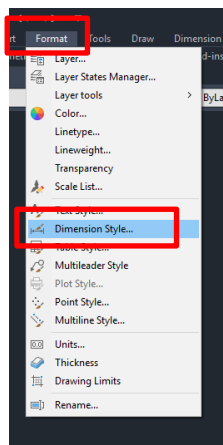


Figure 1-8: Click Dimension Style

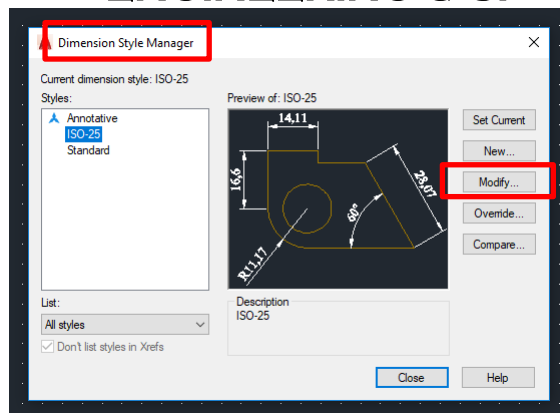


Figure 1-9: Dimension Style Manager Dialogue Box appear. Click Modify.

Dialogue Box to Overrides Current Style: ISO-25 appears.

Change the following:

Tab for Text→Text placement→Vertical→Centered

Tab for Text→ alignment→Horizontal

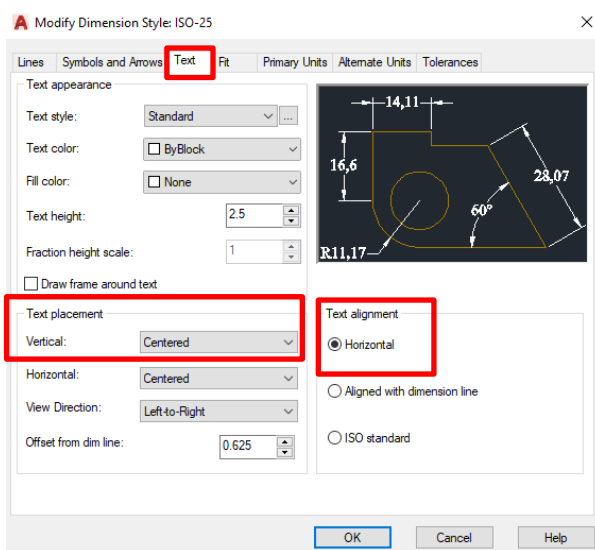


Figure 1-10: Dialog box to change Text placement & alignment

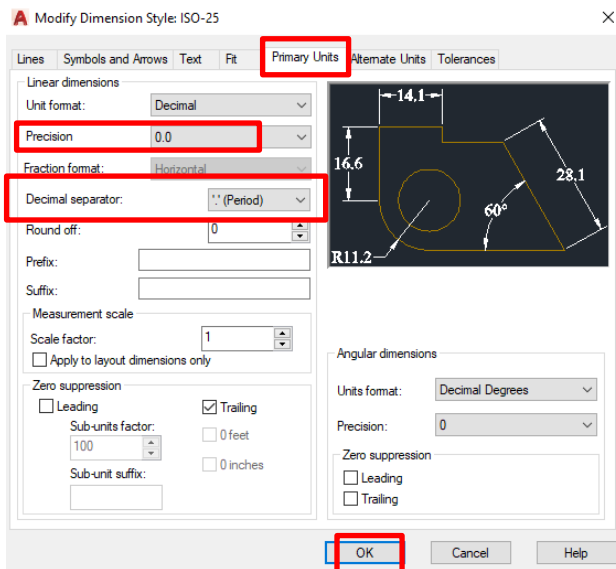


Figure 1-11:

Tab for Primary Units→Linear Dimension→Change precision to 0 or 0.0 depending on decimal places required.

**Tab for primary Units→Linear Dimension→Decimal Separator
→ ”.” Period**

Click OK.

7. **Set Layers:** To create layers such as properties that include colours, linetypes, lineweights, transparencies, etc.

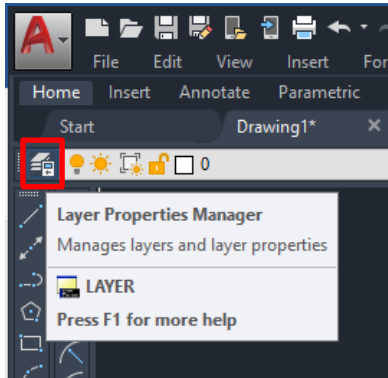


Figure 1-12: Click Layer Properties Manager

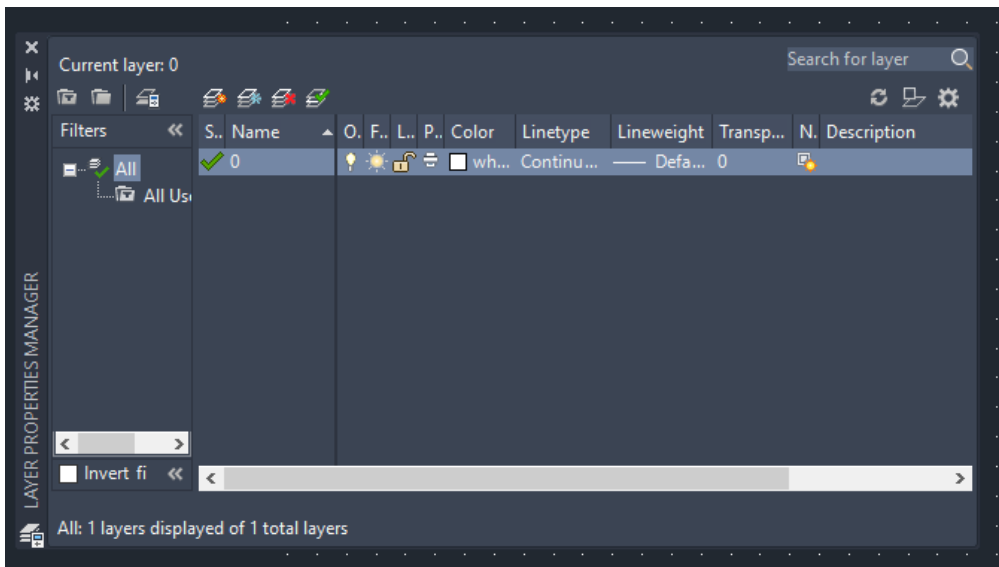


Figure 1-13: Dialog box for Layer Manager appears. Default Layer “0” appears and can be used to draw layout or based objects.

To create a new Layer, follow the steps below:

Right click
mouse over
here

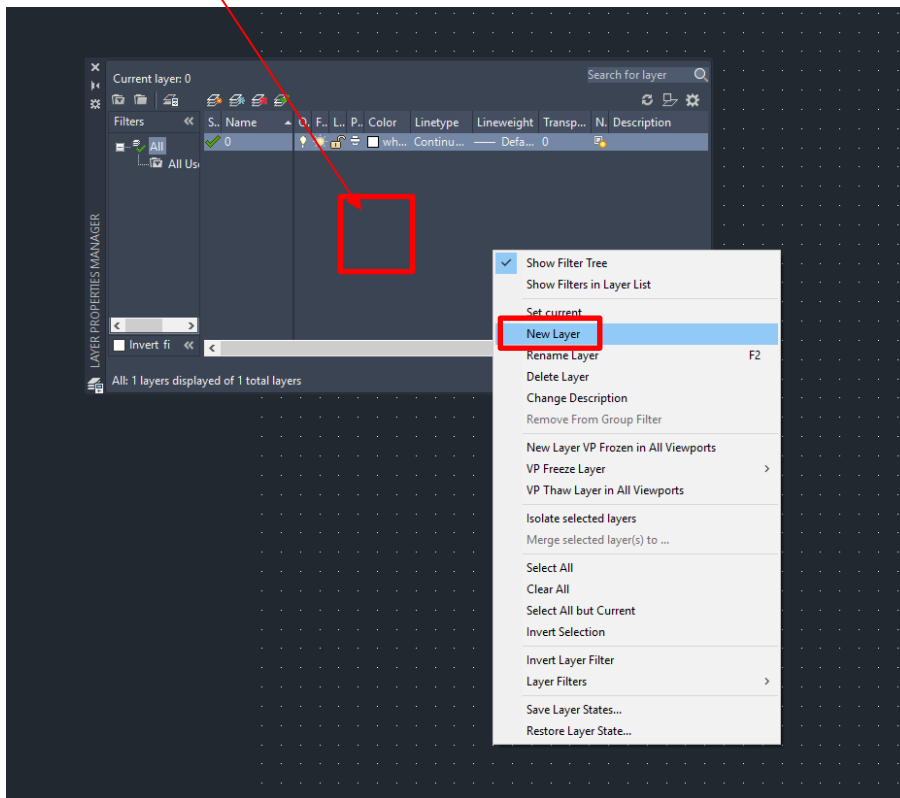


Figure 1-14: Right click the mouse with cursor at properties region and a dialogue Box appears. To create a new layer, Click New Layer

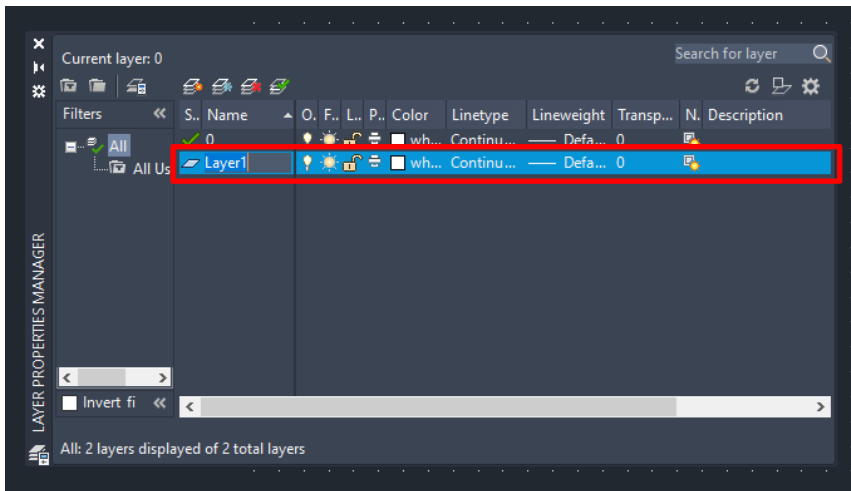


Figure 1-15: A new Layer called **Layer1** appears. You can change layer1 to another name, color, linetype, etc.

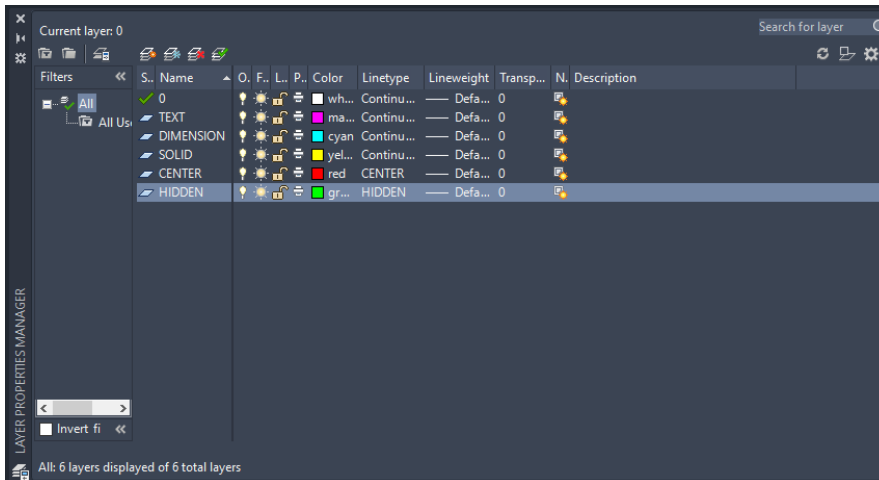


Figure 1-16:

Set the following Layers according to the list below:

Default Layer 0 for drawing Objects, Title Block & Border

NAME.....COLOR.....LINETYPE

Text.....Magenta.....Continuous

Dimension.....Cyan.....Continuous

Solid.....Yellow.....Continuous

Center.....Red.....Center

Hidden.....Green.....Hidden

Steps to for setting Center & Hidden linetypes: Create a new layer, then rename the layer to CENTER, Change the color to red and click on “Continuous”, a dialog box appears. Click load.

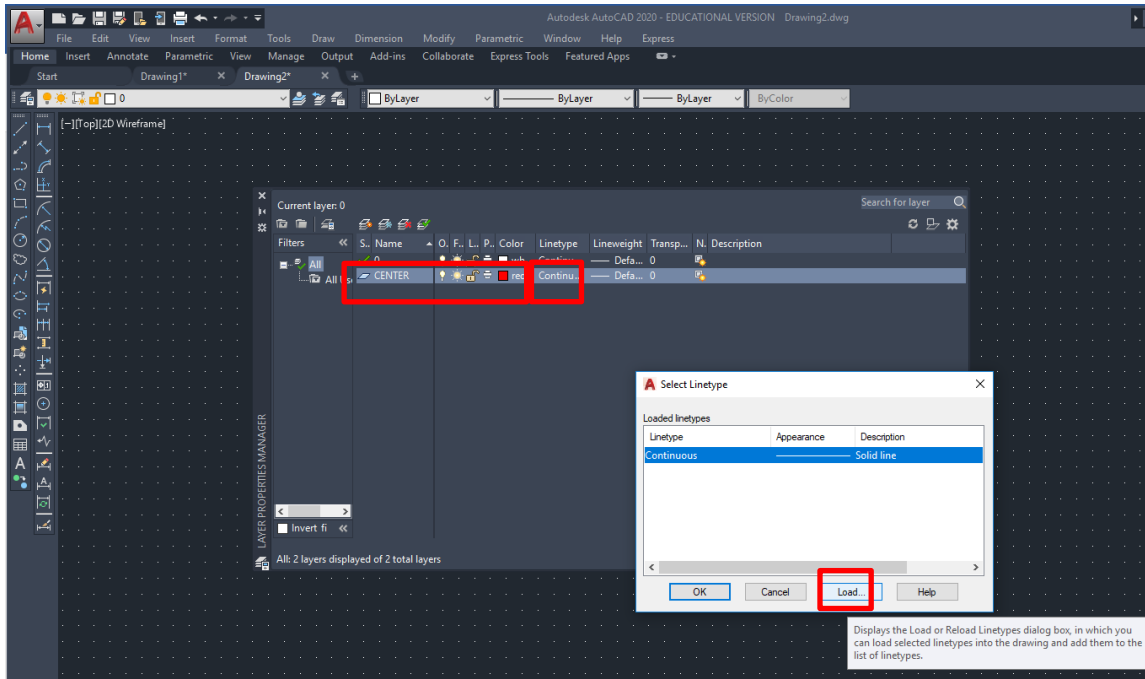


Figure 1-17: Creating Center by loading linetype Centre

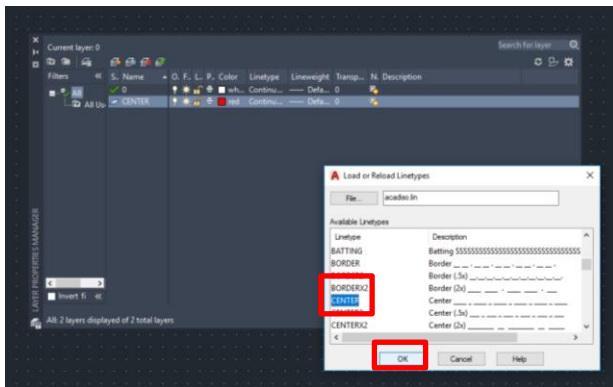


Figure 1-18: A dialog box appears after clicking Load, scroll down and click CENTER and next, click OK.

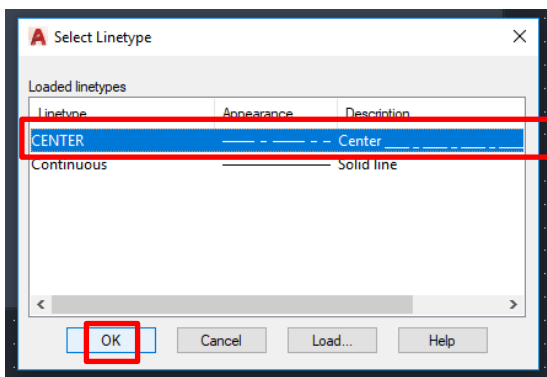


Figure 1-19: Another dialog box appears. Click CENTER and then click OK.

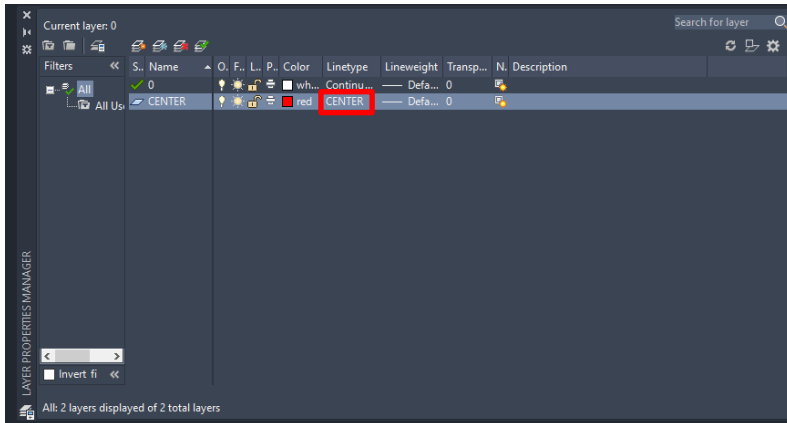


Figure 1-20: A layer for Center is created with loaded Center linetype.

Do another layer for HIDDEN using the same method as layer Center.

8. **Set Linetype Scale:** Appearance of linetypes can be made smaller or larger depending on the size of drawing.

Command: lts

Type: 0.5

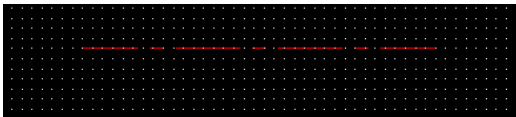


Figure 1-17: Default lts= 1.0

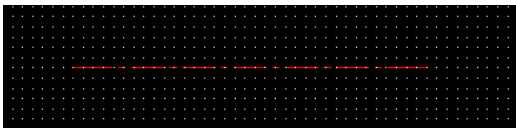


Figure 1-18: Change to lts =0.5

---- END OF UNIT 1 ----

