




Units:

Unit command:

- 1-  **Command entry:** Units or "un".

Controls coordinate and angle display formats and precision.

In this command you can choose the unit for your drawing dimensions. You can also choose the format and precision of the coordinate and angle display. We usually use the decimal type for both length and angle.

Exercise # 1:

1. Type Units in the command line → [Enter].
2. Click on the Length Type, choose Decimal.
3. Set Precision to one digits then click OK.
4. Choose insertion scale to be Millimeter
5. Look at the left lower corner

Exercise # 2:

Repeat exercise # 1 but set the Precision to **three digits** then click OK. Then, look at the left lower corner (what do you notice?)



Limits:

Limits Command:

- 1-  **Command entry:** Limits.

Sets and controls the limits of the grid display in the current Model or layout tab. The limits set the limit of the page that you want to use to draw. Your page can be few square millimeters, or it can be square kilometers.

It is recommended that you set your units before you set the limits of the page. It is also recommended that the lower left corner is set to (0,0).

Exercise # 1:

Set the lower left corner to 0,0 then the upper right corner to 300,500. Turn grid on and zoom all to see the full drawing area that you set.

Exercise # 2:

Set the lower left corner to 0,0 then the upper right corner to 1000,2000. Turn grid on and zoom all to see the full drawing area that you set.

What do you notice?



Grid and Snap:

Grid Command:

- 1-  **Command entry:** Grid.

Snap command:

- 1-  **Command entry:** Snap or "sn".

To enhance drawing speed and efficiency, you can display and snap to a rectangular grid. You can also control its spacing, angle, and alignment.

The grid is a rectangular pattern of dots or lines that extends over the area you specify as the grid limits. Using the grid is similar to placing a sheet of grid paper under a drawing. The grid helps you align objects and visualize the distances between them. The grid is not plotted.

Snap mode restricts the movement of the crosshairs to intervals that you define. When Snap mode is on, the cursor seems to adhere, or "snap," to an invisible rectangular grid. Snap is useful for specifying precise points with the arrow keys or the pointing device.

Grid mode and Snap mode are independent but are often turned on at the same time.

Grid spacing is the distance between two points. However, the snap spacing is the step that the cursor moves when snap is on.

Exercise # 1:

Choose the grid spacing to be 10 then click enter. Choose 10 also for the snap spacing.

What do you notice?

Exercise # 2:

Change the grid spacing to be 1 instead of 10 then click enter. But do not change the snap spacing.

What do you notice?

Now change the snap to be 10 and see the difference.

Note: when you do not see the grid you might need to choose zoom => extent to see the grid.