

Department (Department of Prosthetics & Orthotics Engineering) Class (First)

Subject (Computer aided drawing)

Lecturer (Asst.Lec.Ghadeer Haider Abbas) امقدمة عن اوتوكاد) st term – Lect. ا

- ✓ Introduction to AutoCAD
- ✓ AutoCAD Basics.
- ✓ How to install AutoCAD
- ✓ Run AutoCAD for the first time
- ✓ Using the mouse and keyboard
- ✓ The bars in AutoCAD
- ✓ Units and scale





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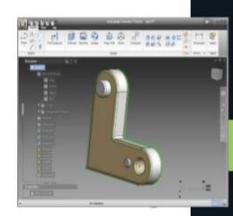
What is CAD?

Autodesk

- Computer Aided Drafting
- Autodesk is the most popular drawing program
- Many student versions available for free online at students.autodesk.com
 - AutoCAD
 - Architecture
 - Mechanical
 - Revit
 - Inventor
 - o Civil
 - MEP
 - o etc.



- · Capabilities:
 - 2D line drawings
 - 3D constructions
 - Rendering
 - Part Assemblies



What is AutoCAD?

Computerized program
Most common in the field of
drawing
Engineering

Free copies are available for students at the link.

https://www.autodesk.com/education/home

AutoCAD capabilities

TD drawing

D drawing

Connecting parts together (assembly)



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AutoCAD is developed and marketed by Autodesk, which released the first version of AutoCAD in December ۱۹۸۲. Since March ۱۹۸۲, it has become the most widely used design program in the world for personal computers, while most computer-aided design programs at that time worked on mainframes.

AutoCAD is a general-purpose design program used in many fields (civil, architectural, electrical, mechanical, interior design, and drawing). It is used by engineers of various specialties for construction drawings and engineering designs, in addition to many professions and industries.

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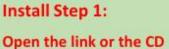
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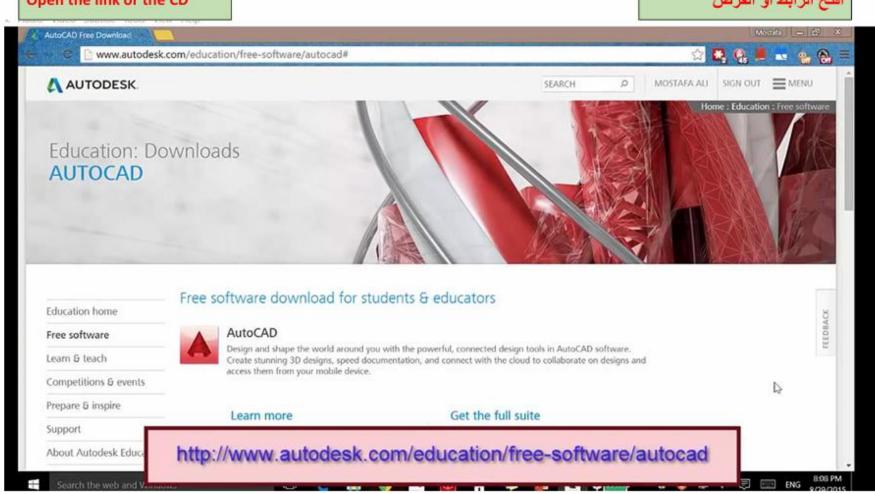
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التنصيب: الخطوة 1: افتح الرابط او القرص



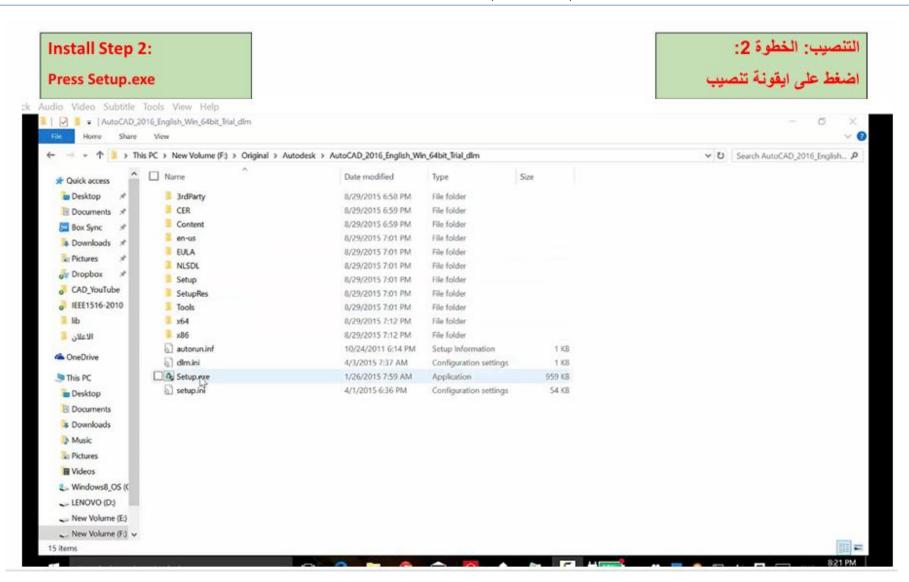


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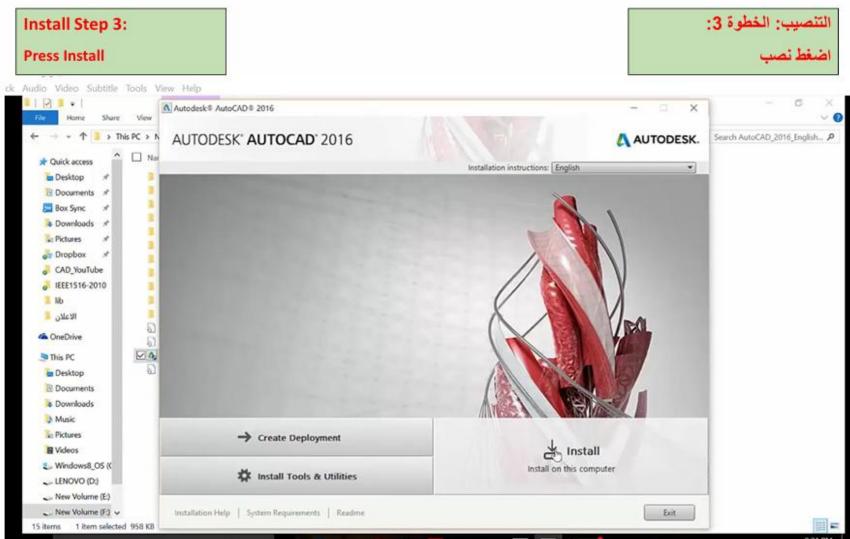
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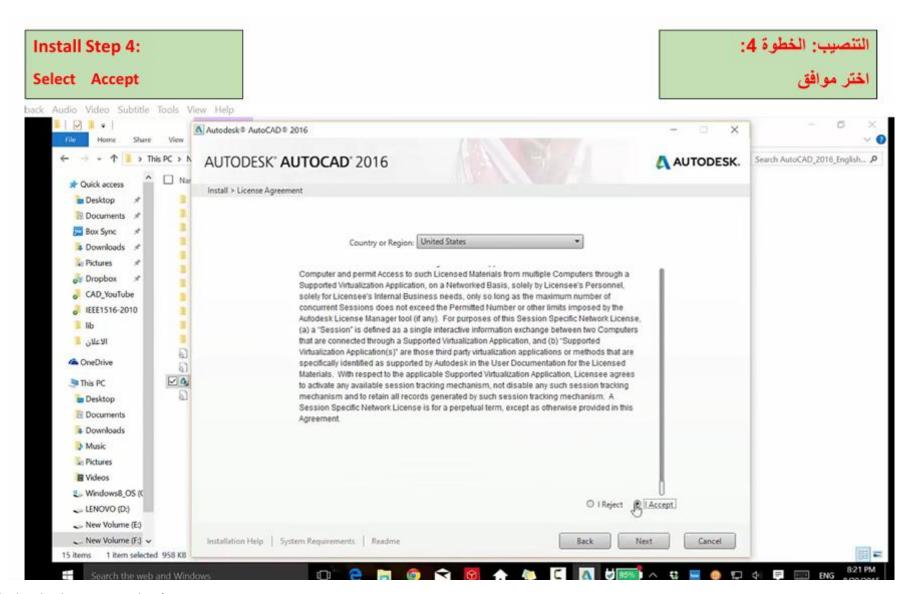




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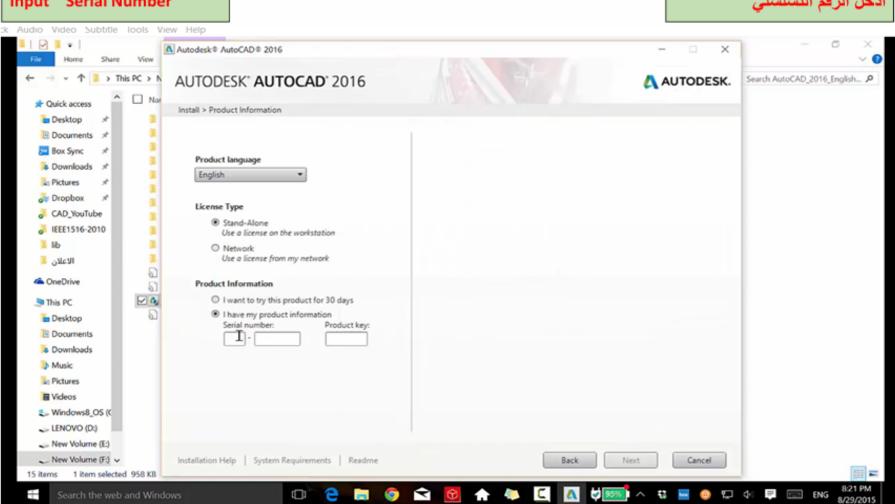
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Install Step 5: Input Serial Number

التنصيب: الخطوة 5: ادخل الرقم التسلسلي



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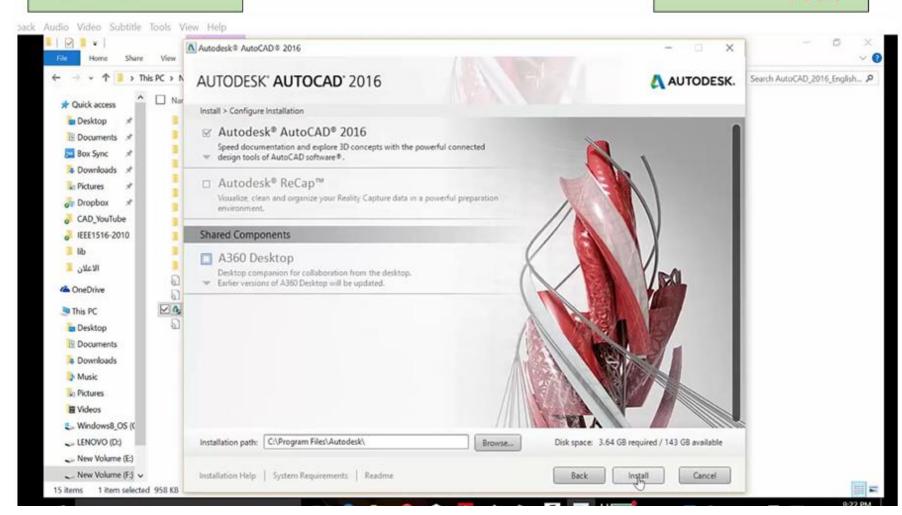
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Install Step 6:

Select Autodesk

التنصيب: الخطوة 6:

ختر اوتوديسك





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Install Step 7:

Wait until Completion of installation

التنصيب: الخطوة 7: انتظر اكتمال التنصيب



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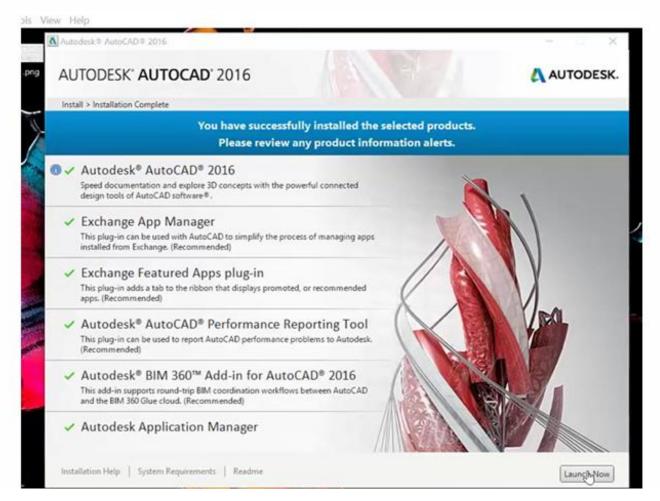
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Install Step 8:

Press Launch Now

التنصيب: الخطوة 8: اضغط اطلق الان



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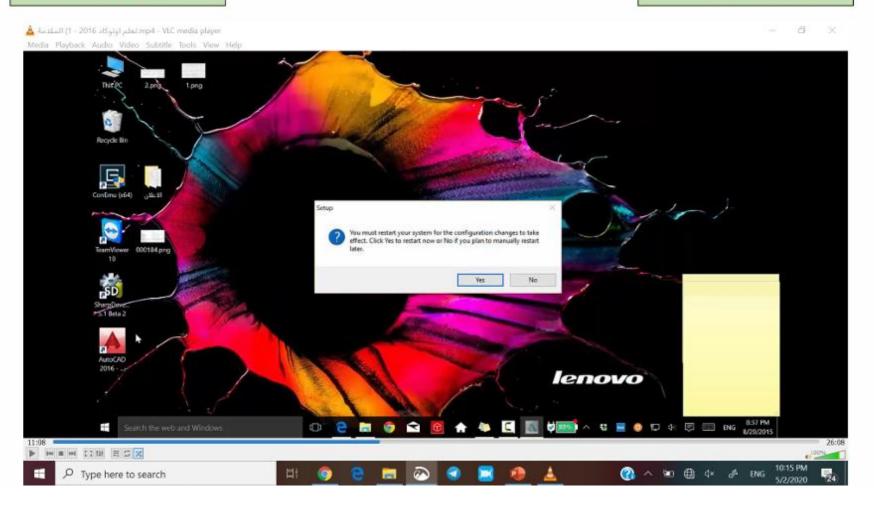
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Install Step 9:

Restart you computer

التنصيب: الخطوة 9: اعد تشغيل الحاسوب



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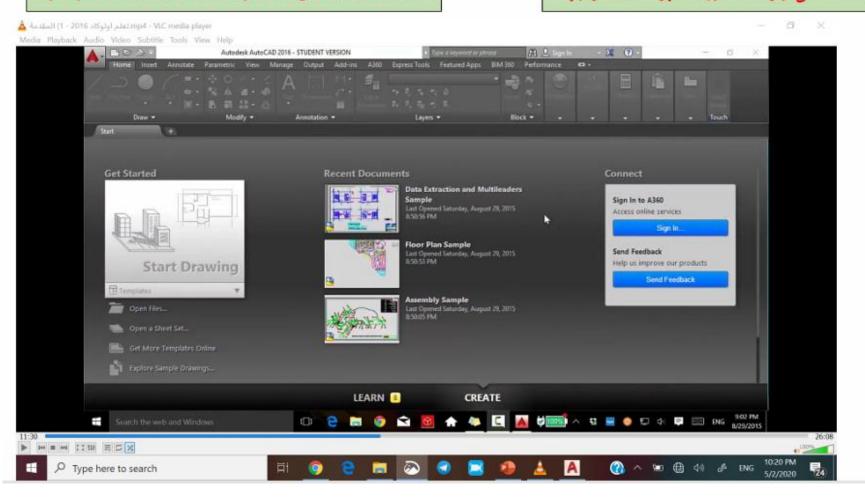
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Install Step 10:

If you press on the icon of run you will get this interface

التنصيب: الخطوة 10: عند الضغط على ايقونة التشغيل ستظهر لك هذه الواجهة



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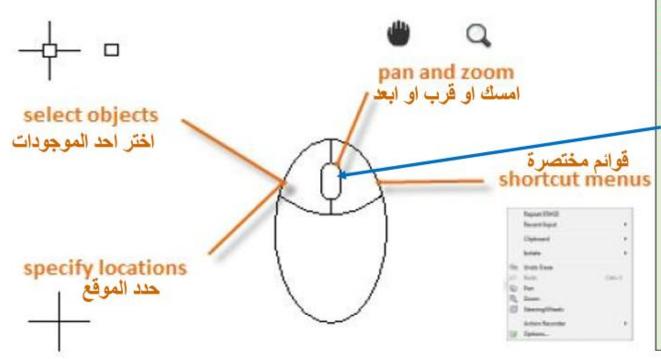
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الفأرة (الماوس)

The Mouse

Most people use a mouse as their pointing device, but other devices have equivalent controls.



Scroll

Very Important

Scroll Forward → Zoom in

Scroll Backward → Zoom out

Hold Scroll → Hold

لبكرة: مهمة جدا

ور البكرة باتجاه الامام --> تقريب

ور البكرة باتجاه الخلف -> ابعاد

لصورة

ضغط على البكرة – امسك الرسم و حركه أينما تريد



$\label{eq:decomposition} \mbox{Department of Prosthetics \& Orthotics Engineering)}$

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Escape

اوقف الامر Stop Command

Keyboard

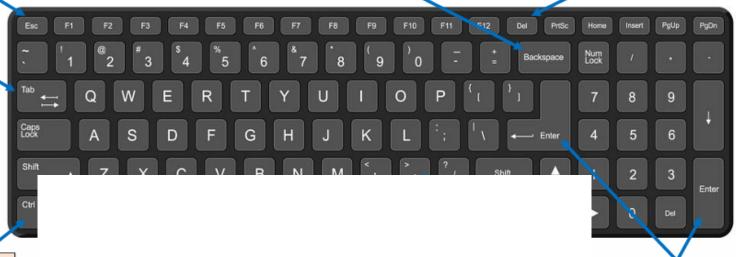
Back Space
Delete input

احذف

امسح Delete

امسح العنصر Delete Element or more

امسح الخط او الدائرة Delete Line, Circle,



Control Important; many tasks

اختر Ctrl+A : Select All

الخل Enter

Very Important

To Execute any command

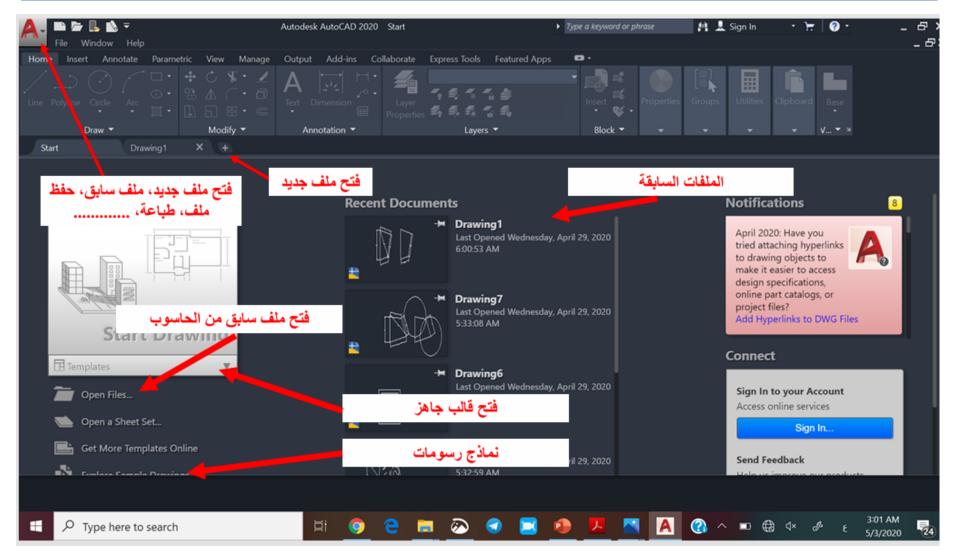
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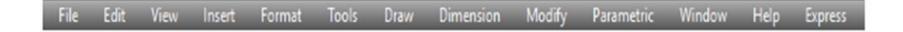
The AutoCAD screen consists from top to bottom of the following elements:

\'- Title bar: It contains from right to left the name of the program, the name of the open file, the print option, the save option, the open file option, and the open new file option.



Autodesk AutoCAD 2019 Drawing2.dwg

Y- Drop-down menu bar: It is located below the title bar and contains the following menus: view - file





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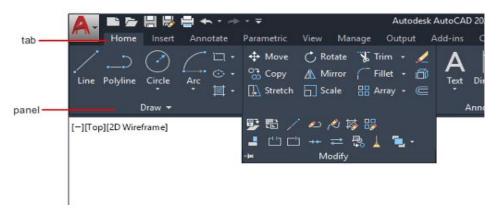
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\(^{\text{-}}\) Ribbon bar: Located below the drop-down menu bar.



The ribbon consists of a series of tabs organized into panels that contain many of the tools and controls available in the toolbars.



The Ribbon bar provides access to a dialog box related to that panel. The dialog box in question is displayed in the relevant dialog box. Clicking the dialog box launcher, indicated by the arrow icon, in the lower right corner of the panel.





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4- The black screen: It is the drawing screen through which graphic charts can be inserted.



•- Command bar: which is used to deal with the commands entered into the program.

If you press the (F^{γ}) button, the command bar will appear on the entire screen, and when you press it again, the command bar will return to its normal size at the bottom of the screen.



\'- Status bar: Located below the command bar, it contains a set of special commands





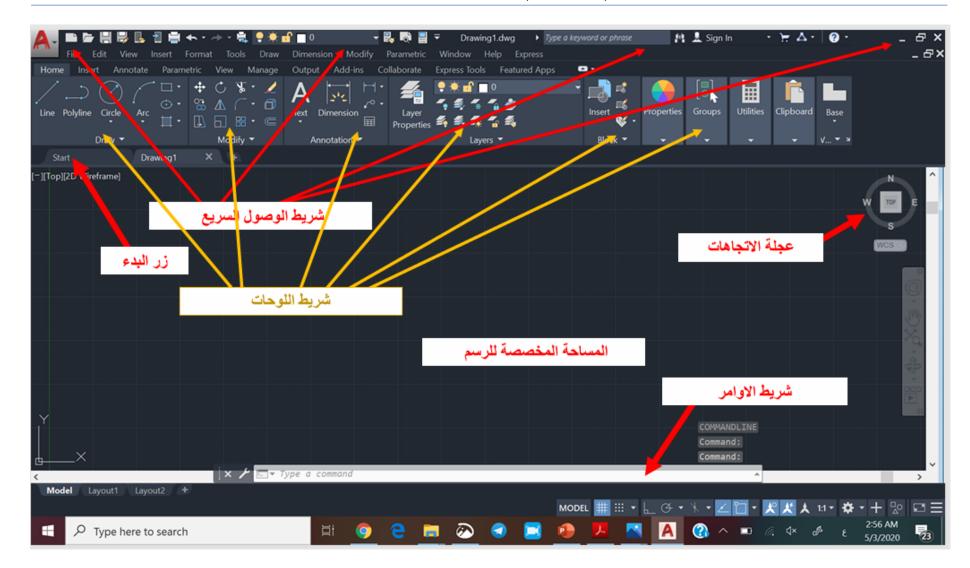
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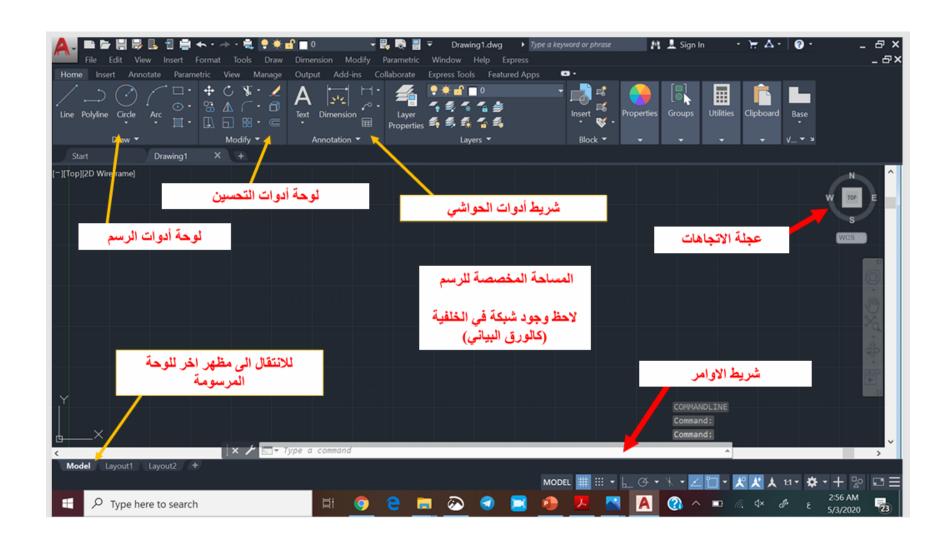
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Remarks

Units

No Units Are Required In AutoCAD

The Scale:

AutoCAD does not care about units and the user must decide which units of measurement he uses, but the unit used in a single drawing must be unified.

Drawing scale

The suitable and common Scale is 1:1

The appropriate and common drawing scale in AutoCAD is 1:1.

This scale is during drawing

But you can use the appropriate drawing scale for printing and according to the size of the printing paper.