



Autocad

Lecture 3

Setup of the units

Setup of the drawing grid

Draw Line commands

Draw Polyline commands

Draw Circle commands

Application of Line and Circle commands





Draw list

This list contains a set of commands, each of which draws a specific shape according to the inputs, which could be the starting point, the center, and the radius up to the ending point.

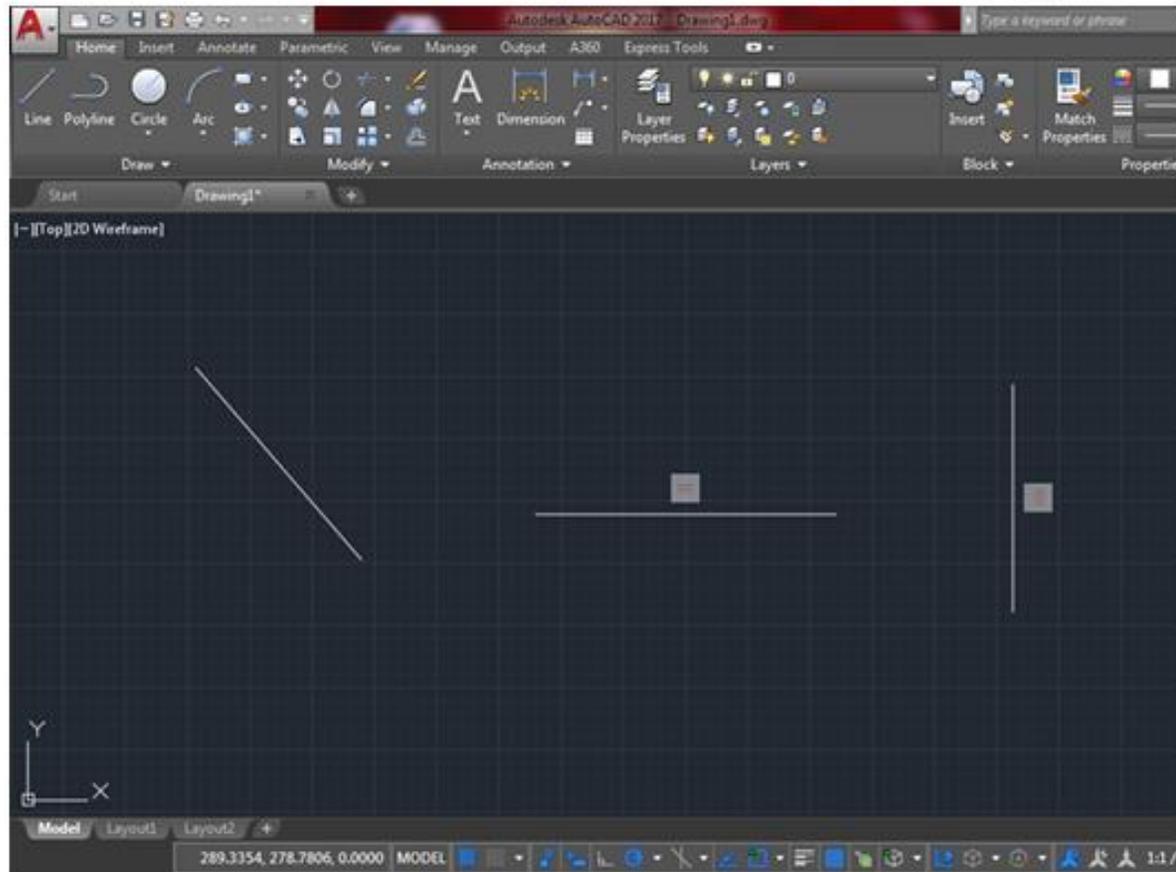
There are basic commands that you rely on when drawing shapes, due to their clarity and ease of finding them in the list. The commands are:

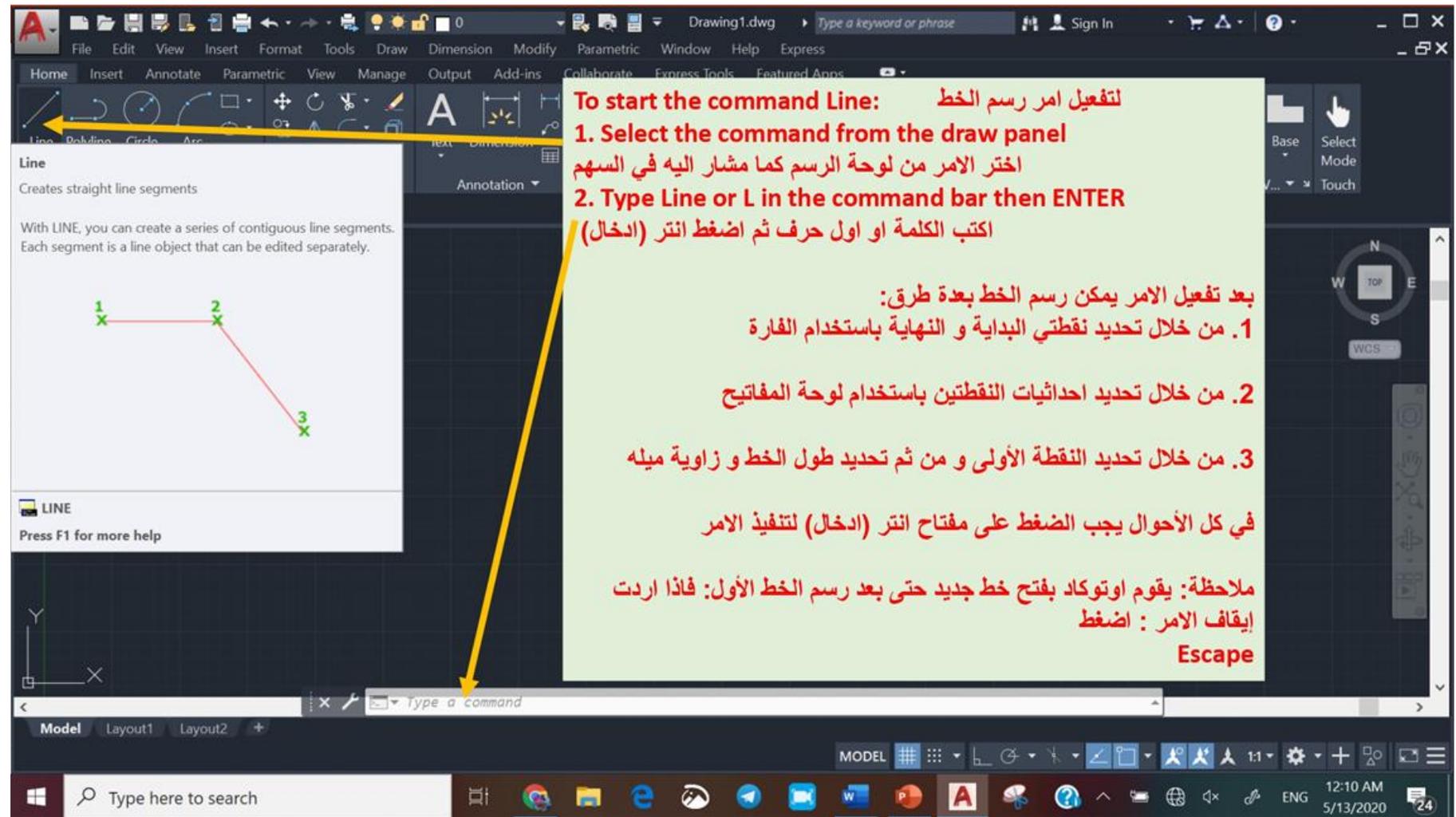




Line

One of the most important commands that can be used to draw a line, whether it is diagonal, straight or vertical.





To start the command Line: لتفعيل امر رسم الخط

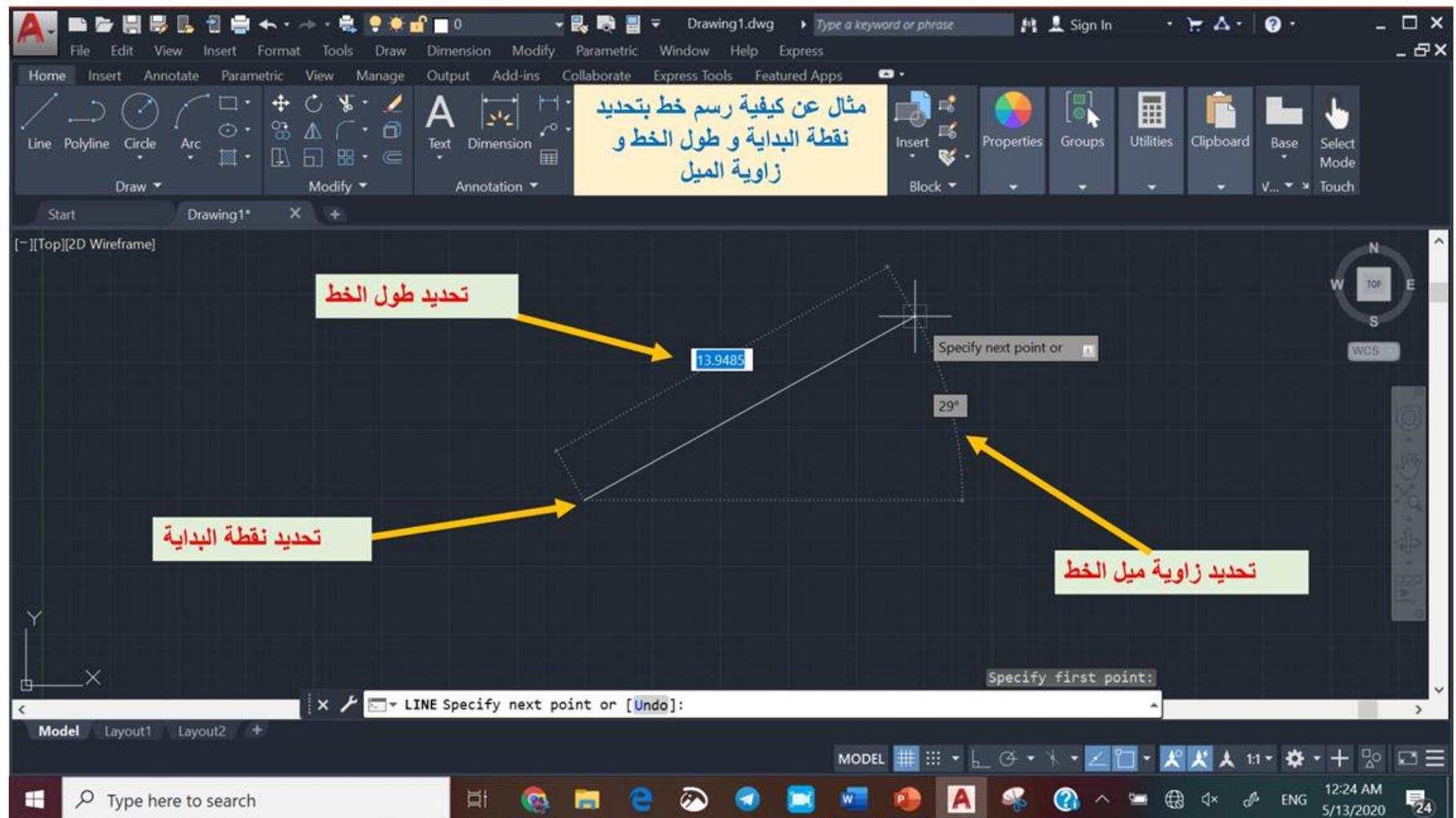
- 1. Select the command from the draw panel** اختر الامر من لوحة الرسم كما مشار اليه في السهم
- 2. Type Line or L in the command bar then ENTER** اكتب الكلمة او اول حرف ثم اضغط انتر (الدخال)

بعد تفعيل الامر يمكن رسم الخط بعدة طرق:

1. من خلال تحديد نقطتي البداية و النهاية باستخدام الفارة
2. من خلال تحديد احدائيات النقطتين باستخدام لوحة المفاتيح
3. من خلال تحديد النقطة الاولى و من ثم تحديد طول الخط و زاوية ميله

في كل الأحوال يجب الضغط على مفتاح انتر (الدخال) لتنفيذ الامر

ملاحظة: يقوم اوتوكاد بفتح خط جديد حتى بعد رسم الخط الاول: فاذا اردت إيقاف الامر : اضغط **Escape**





Draw a straight line with a value of 1000 and a distance of zero

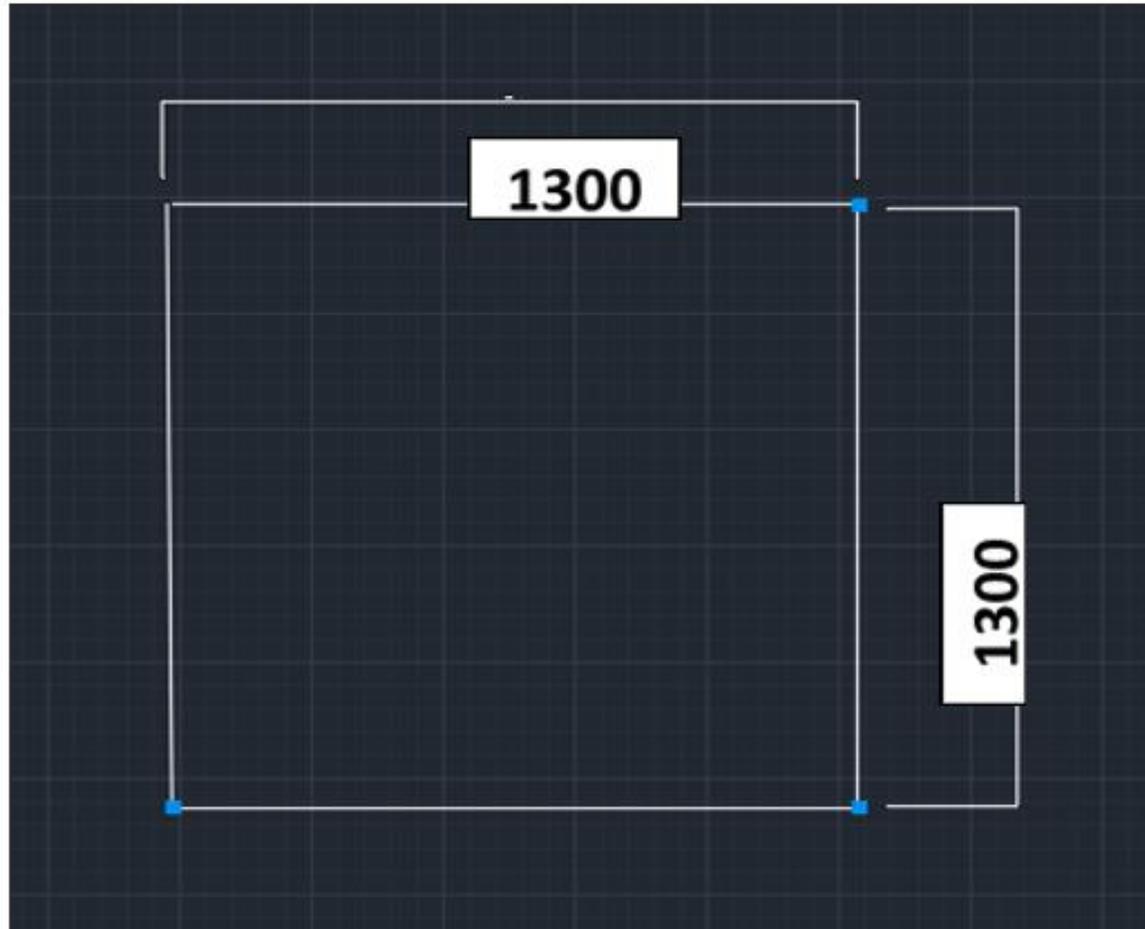


Draw a straight line with a period of length (2000) and a strength of (90).





Draw a square, the length of each side of the square is (1300).



Polyline

This command is used to draw a line composed of multiple lines. There are three ways to achieve this:

Command:

- 1- Through the drop-down menu bar, where we choose Draw, then Polyline.**
- 2- Through the drawing toolbar, we choose the polyline command.**

This command is characterized by the fact that it is possible to draw straight lines and arcs connected to each other. This command is also characterized by the fact that it is possible to give a thickness at the beginning of the line that is different from the thickness at its end.



The screenshot shows the AutoCAD interface with the Polyline command help window open. The help window contains the following text:

Polyline
Creates a 2D polyline

A 2D polyline is a connected sequence of segments created as a single planar object. You can create straight line segments, arc segments, or a combination of the two.

PLINE
Press F1 for more help

The command line at the bottom shows the following text:

```
Specify start point: *Cancel*  
Command:  
Command: _pline
```

A yellow arrow points from the Polyline help window to a text box on the right.

This is similar to the previous one (line)

But it consists of several connected lines.

But the line command also draws connected lines; what's the difference?

The difference is that after drawing the polyline, AutoCAD treats it (with all its parts) as a single element. If you copy it, it copies all the connected lines, and if you delete it, it deletes all the lines as well.





Circle

Drawing circles is one of the important commands that can be accessed through several Options are:

Through the **Ribbon bar**, we choose the command (**circle**).

From the drop-down menu bar, we choose the **Draw** menu and choose the **Circle** command.

By typing the shortcut (**C**) in the command bar

When you click on **Circle**, several options will appear, as follows:

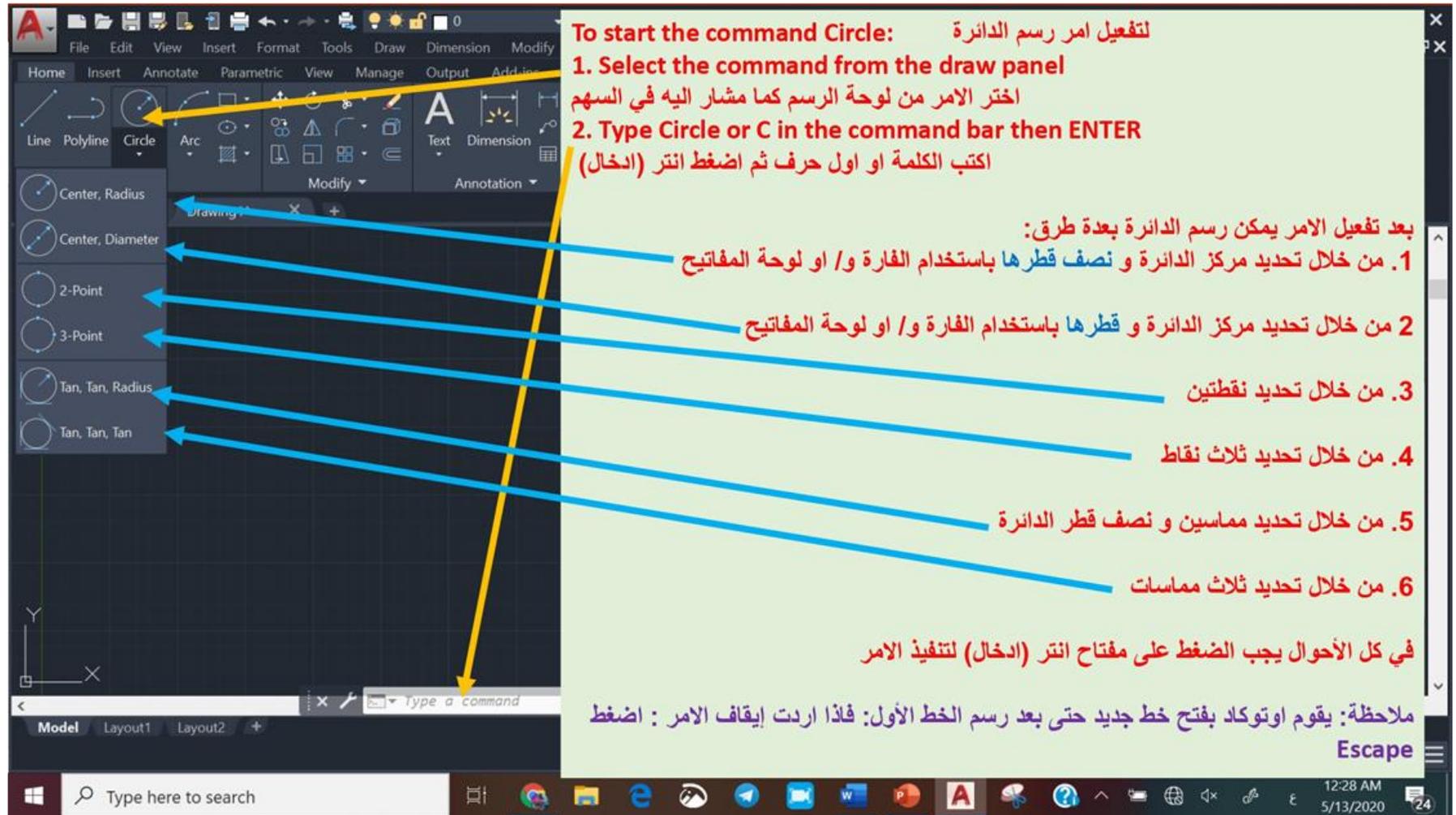
Center, Radius

This command is used to draw a circle by selecting the center point and the radius length.

Center, Diameter

This command is used to draw a circle by selecting the center point and the diameter length.





To start the command Circle: لتفعيل امر رسم الدائرة

- 1. Select the command from the draw panel**
اختر الامر من لوحة الرسم كما مشار اليه في السهم
- 2. Type Circle or C in the command bar then ENTER**
اكتب الكلمة او اول حرف ثم اضغط انتر (ادخال)

بعد تفعيل الامر يمكن رسم الدائرة بعدة طرق:

1. من خلال تحديد مركز الدائرة و نصف قطرها باستخدام الفارة و/ او لوحة المفاتيح
2. من خلال تحديد مركز الدائرة و قطرها باستخدام الفارة و/ او لوحة المفاتيح
3. من خلال تحديد نقطتين
4. من خلال تحديد ثلاث نقاط
5. من خلال تحديد مماسين و نصف قطر الدائرة
6. من خلال تحديد ثلاث مماسات

في كل الأحوال يجب الضغط على مفتاح انتر (ادخال) لتنفيذ الامر

ملاحظة: يقوم اوتوكاد بفتح خط جديد حتى بعد رسم الخط الأول: فاذا اردت إيقاف الامر : اضغط
Escape

