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# **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**

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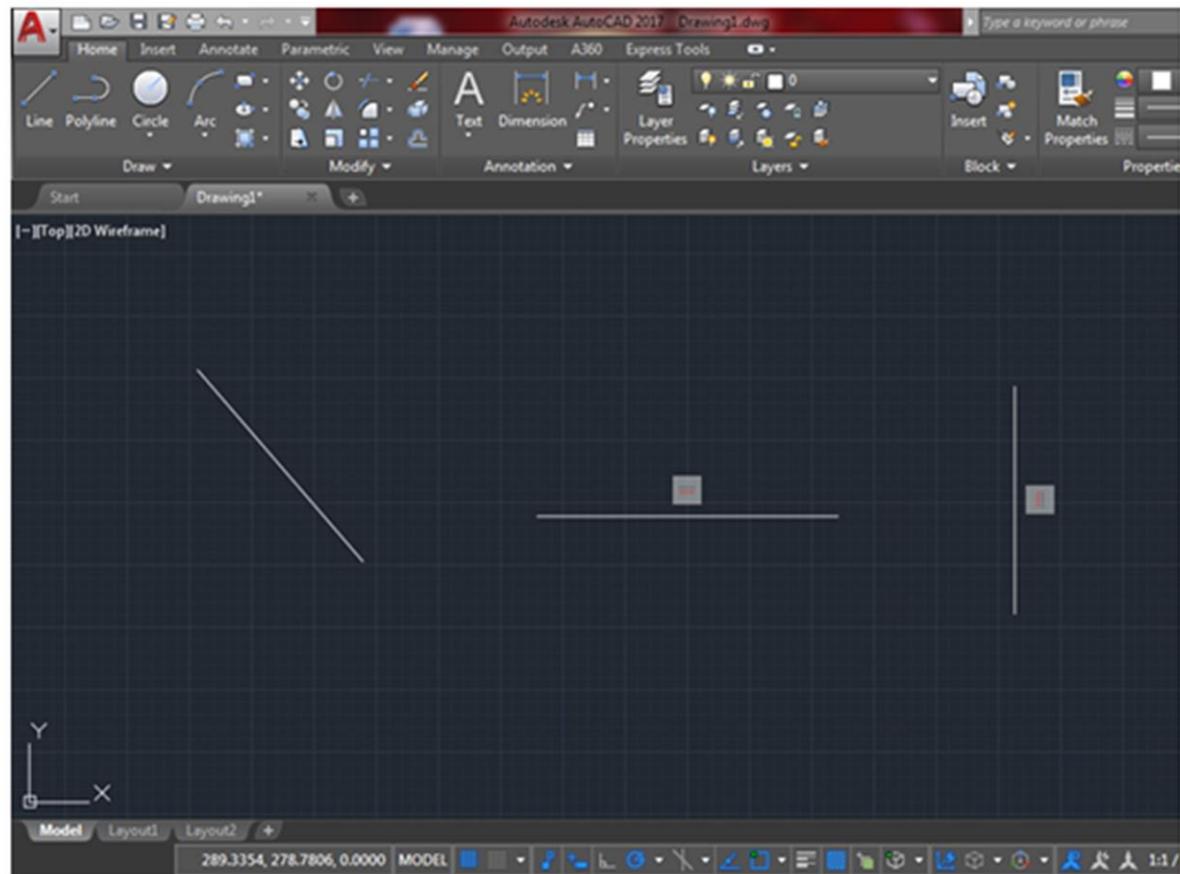
## **Draw list**

**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.**



**لتفعيل امر رسم الخط**

**To start the command Line:**

- 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 (ادخال)

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 (ادخال) لتنفيذ الامر

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

**Escape**

LINE  
Creates straight line segments  
With LINE, you can create a series of contiguous line segments. Each segment is a line object that can be edited separately.

Press F1 for more help

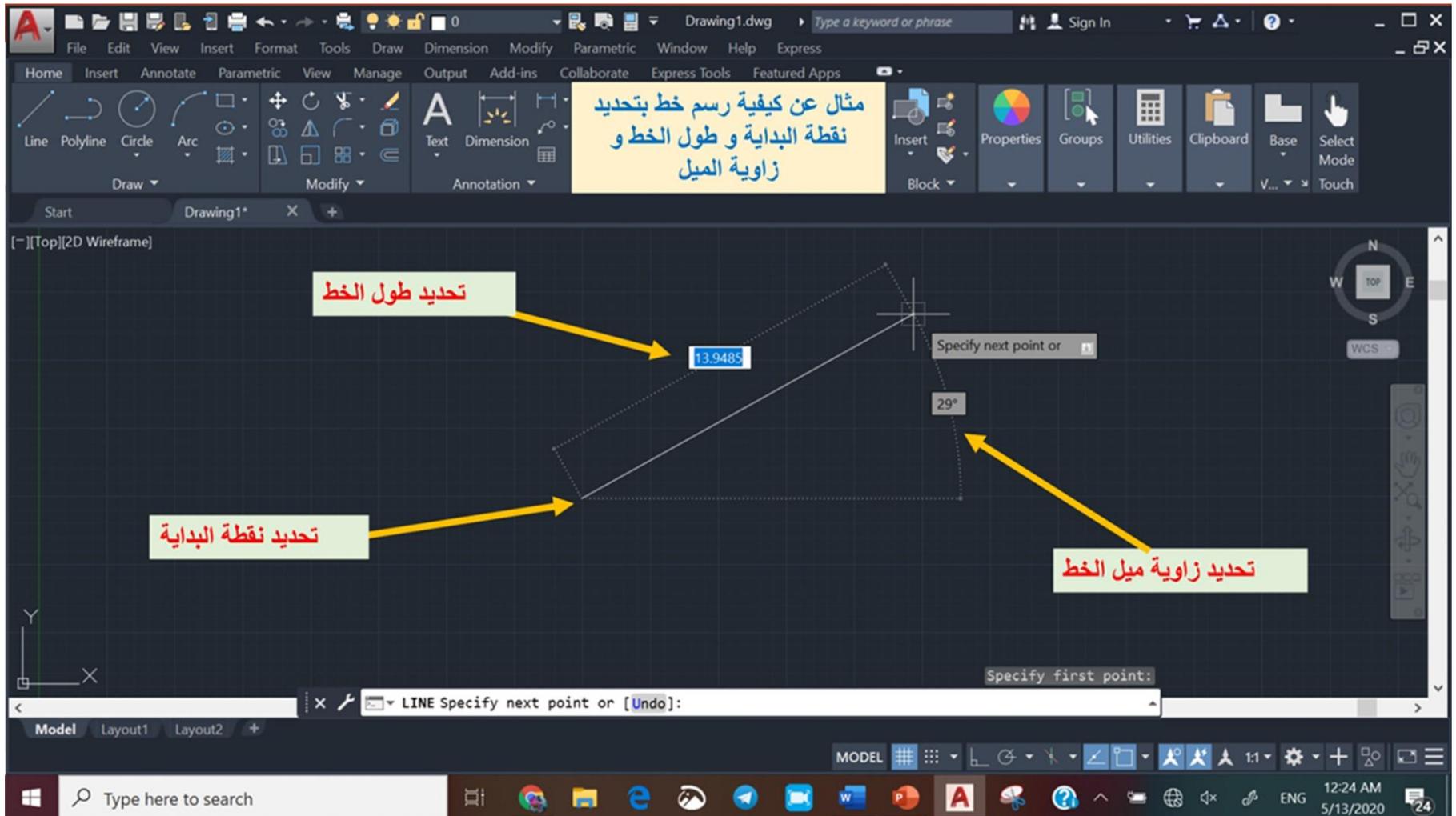
Type a command

Model Layout1 Layout2

MODEL

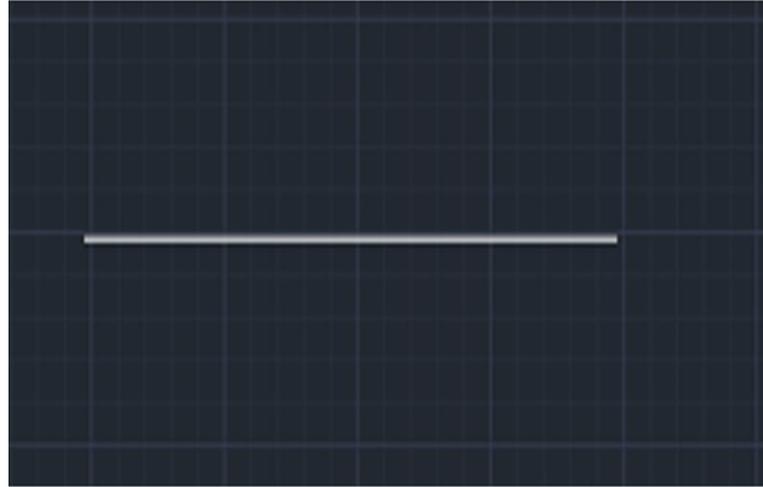
Type here to search

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

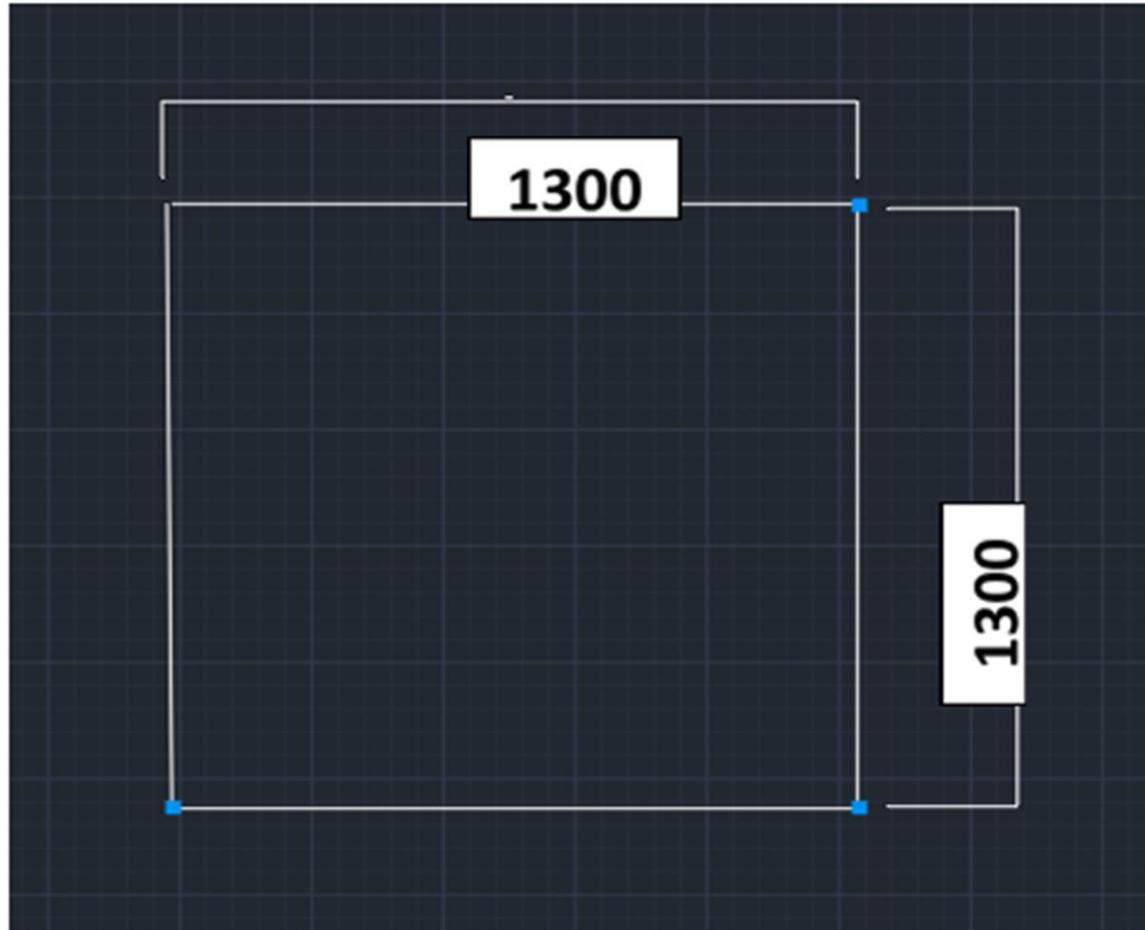


**Draw a straight line with a period of length (2000) and a strength of (90).**



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



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## **Polyline**

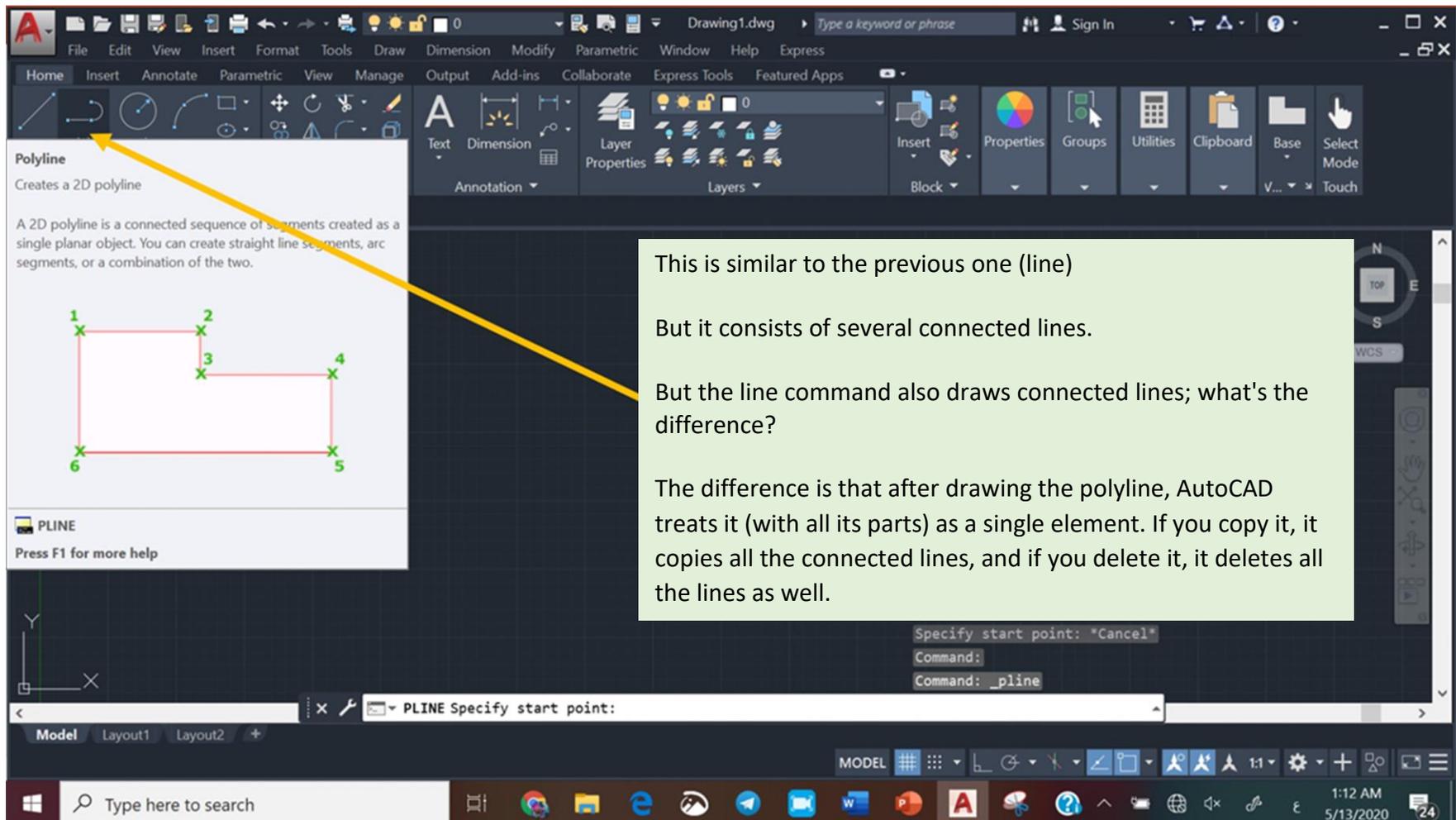
**This command is used to draw a line composed of multiple lines. There are three ways to achieve this:**

**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.**



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.

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## 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.

The image shows a screenshot of the AutoCAD software interface. The 'Draw' tab is active, and the 'Circle' command is selected in the ribbon. A dropdown menu is open, showing various circle creation methods: Center, Radius; Center, Diameter; 2-Point; 3-Point; Tan, Tan, Radius; and Tan, Tan, Tan. A yellow arrow points from the 'Circle' button in the ribbon to the dropdown menu. A text box on the right contains instructions in Arabic, with blue arrows pointing from the text to the corresponding options in the dropdown menu. The text box also includes a command line prompt and a note about the Escape key.

**لتفعيل امر رسم الدائرة**

**To start the command Circle:**

- 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: فإذا اردت إيقاف الامر : اضغط

Escape

