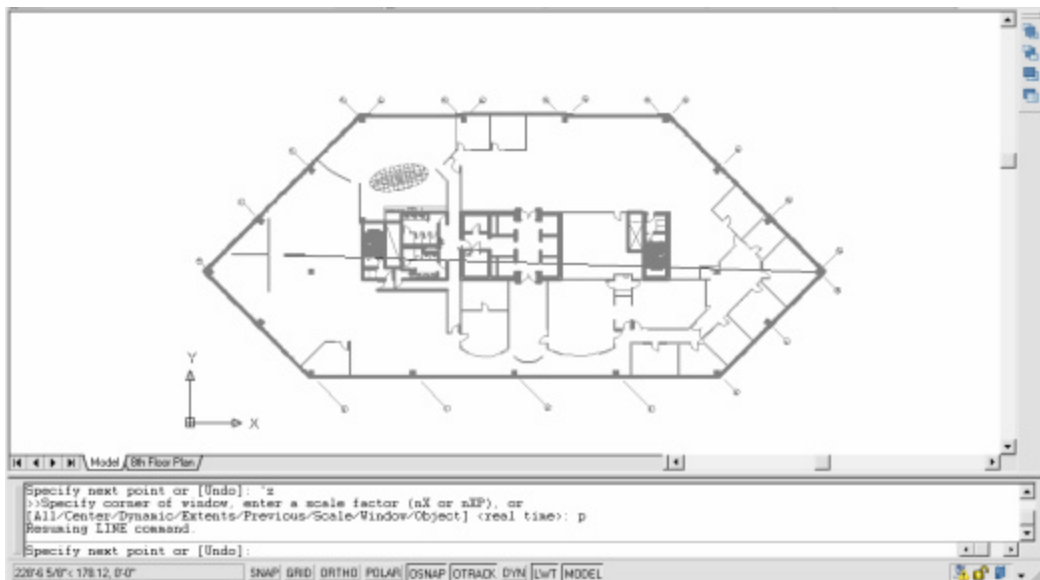

Chapter 14
Advanced Display Commands

AutoCAD 2D Tutorial

Transparent Commands 14.1

Transparent commands are those started while another is in progress. Precede transparent commands with an apostrophe.

- Type** LINE at the command prompt.
Command: **LINE**
Specify first point: **(pick point)**
Specify next point or [Undo]: **'zoom**
>>Specify corner of window, enter a scale factor (nX or nXP), or
[All/Center/Dynamic/Extents/Previous/Scale/ Window]
<real time>: **(pick corner)**
>>>>Specify opposite corner: **(pick other corner)**



TIP:

Commands that do not select objects, create new objects, or end the drawing session usually can be used transparently.

AutoCAD 2D Tutorial

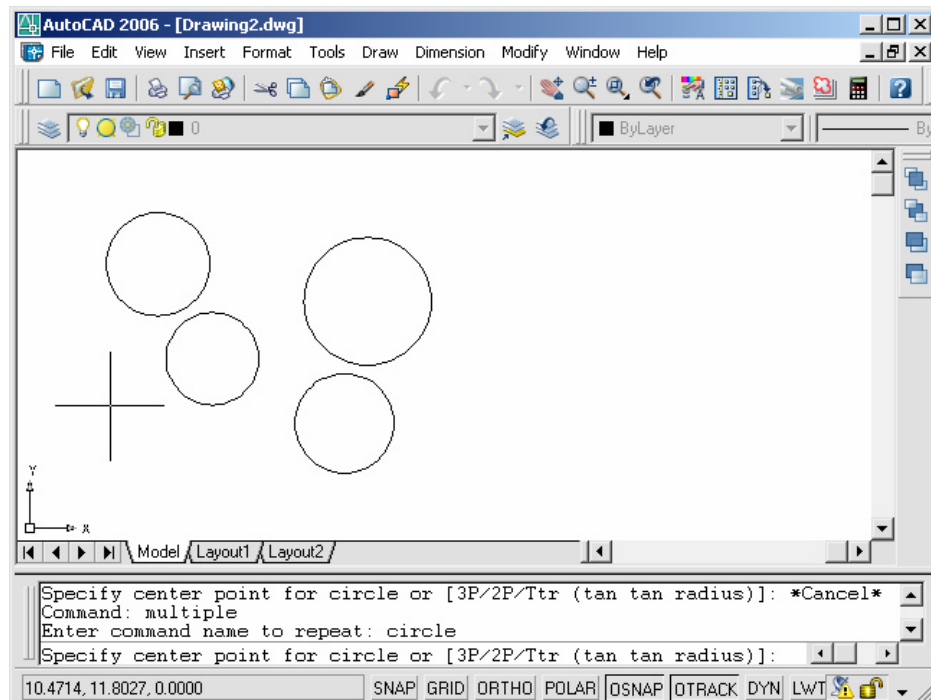
Multiple Command 14.2

Multiple repeats the specified command until canceled

If you want to repeat a command that you have just used, press ENTER or SPACEBAR, or right-click your pointing device at the Command prompt.

You also can repeat a command by entering multiple, a space, and the command name, as shown in the following example:

1. **Type** **MULTIPLE** before each command
 Command: multiple circle



AutoCAD 2D Tutorial

Advanced Calculator Function 14.3

Evaluates mathematical and geometric expressions

1. **Type** CAL at the command prompt. Command: **cal** (or '**cal**') Initializing...>>
Expression: **1+1**
2

Numeric operators

- () Groups expressions
- ^ Indicates exponentiation
- *, / Multiplies, divides
- +, - Adds, subtracts

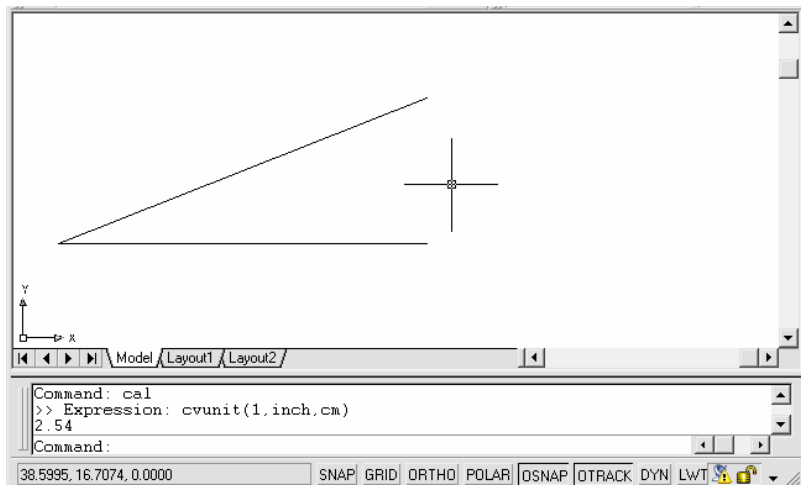
Vector operators

- () Groups expressions
- & Determines the vector product of vectors (as a vector)
 $[a,b,c]&[x,y,z] = [(b*z) - (c*y) , (c*x) - (a*z) , (a*y) - (b*x)]$
- * Determines the scalar product of vectors (as a real number)
 $[a,b,c]*[x,y,z] = ax + by + cz$
- *, / Multiplies, divides a vector by a real number a*
 $[x,y,z] = [a*x,a*y,a*z]$
- +, - Adds, subtracts vectors (points)
 $[a,b,c] + [x,y,z] = [a+x,b+y,c+z]$

AutoCAD 2D Tutorial

Converts units of measure

- Type** CAL at the command prompt.
Command: **cal(or 'cal)**
Initializing...>> Expression: **cvunit(1,inch,cm)**
2.54



Determines Angles

- Type** CAL at the command prompt.
Command: **cal(or 'cal)**
Initializing...>> Expression: **ang(end,end,end)**
45