

# AutoCAD 2008: One Step at a Time

## *Lesson 9: More Editing Tools*

**08R9**

### **Exercises**

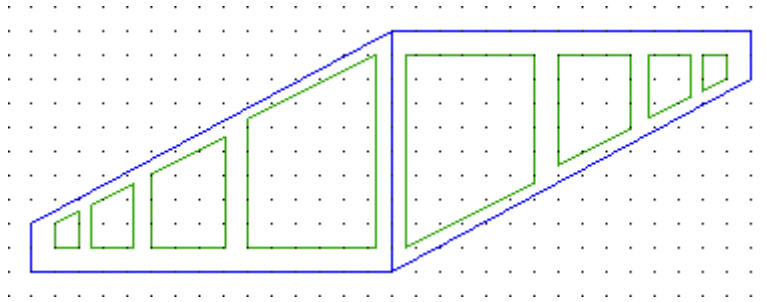
1. Create a drawing template with the following parameters:

- 1.1. Lower left limits: 0,0
- 1.2. Upper right limits: 17,11
- 1.3. Grid: 1/2
- 1.4. Snap: 1/4
- 1.5. Layers: At right
- 1.6. Save the template as *BwLay.dwt* in the C:\Steps\Lesson09 folder.

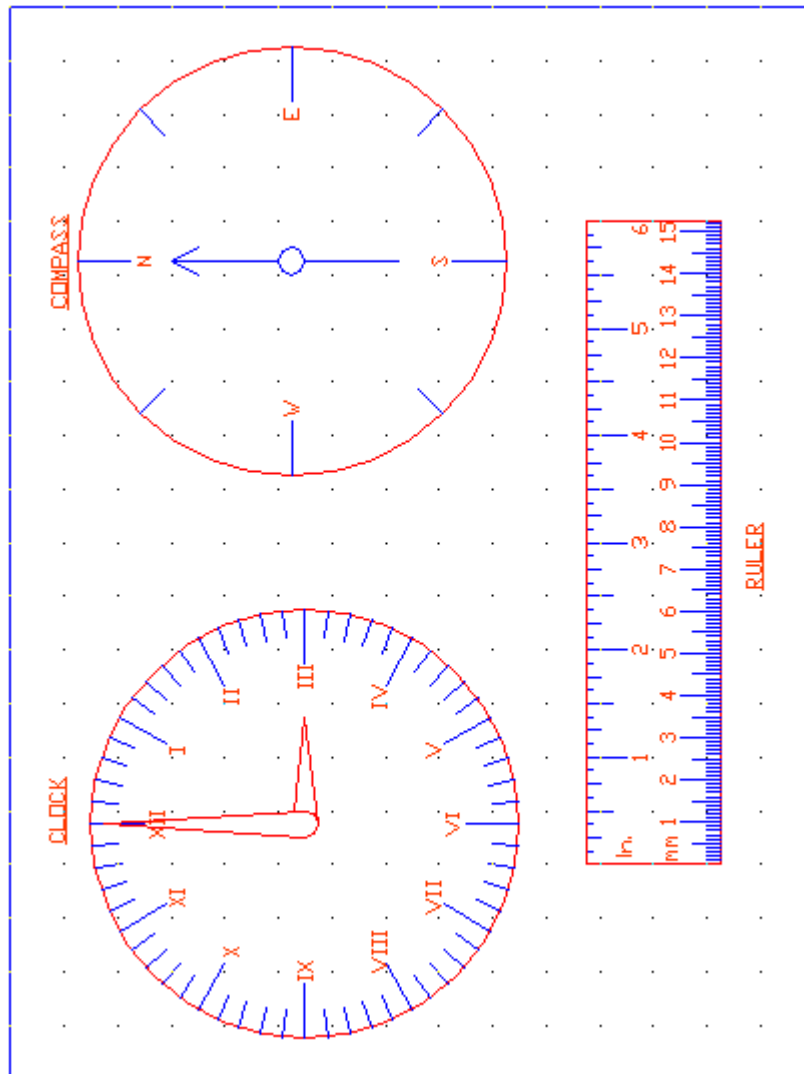
<b>LAYER</b>	<b>COLOR</b>	<b>LINETYPE</b>
Obj	red	continuous
Cl	cyan	center2
Hidden	magenta	hidden2
Text	yellow	continuous
Dim	blue	continuous

2. Start a new drawing using the *BwLay.dwt* template. (You created this in Exercise #1.)

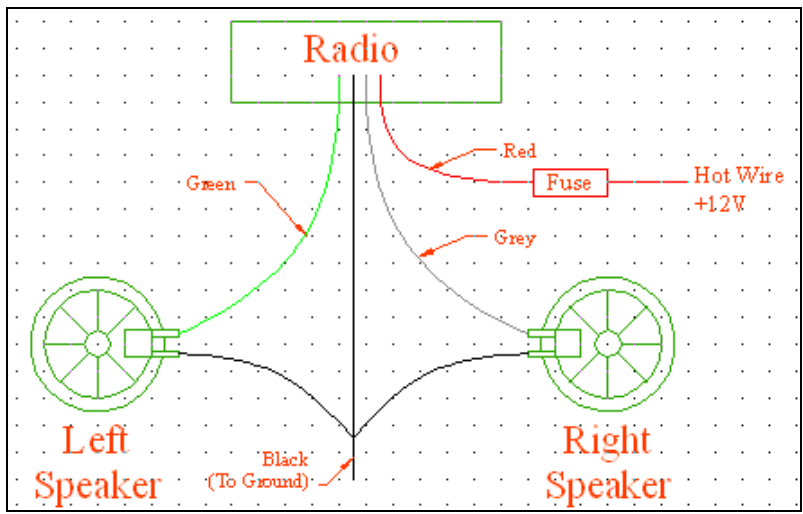
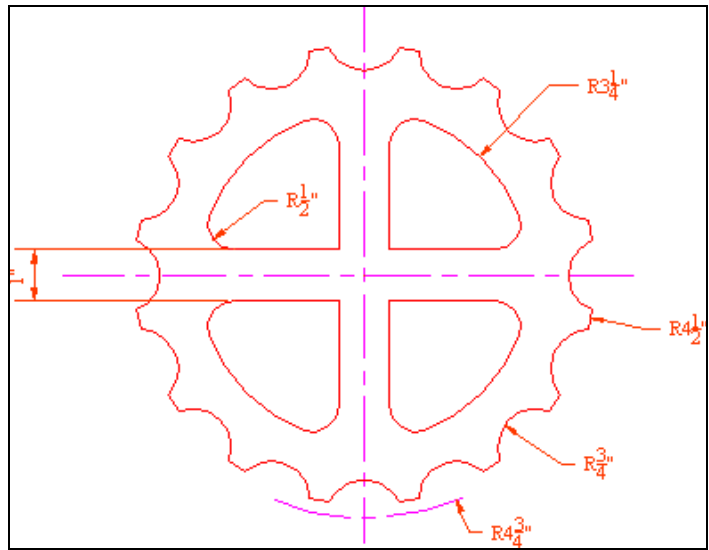
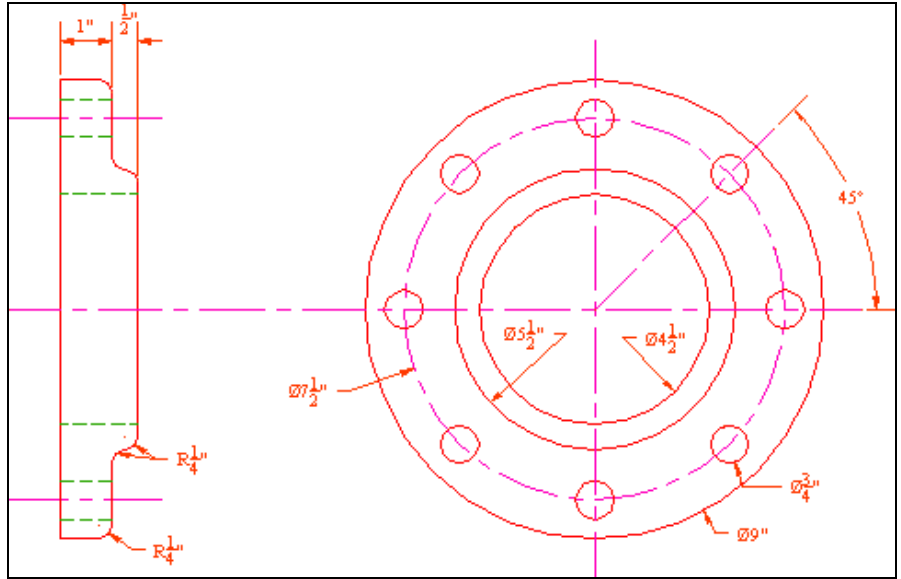
- 2.1. Create the drawing below. You're allowed to draw one box and the outline of the wall. You may use the following commands to help: **Copy**, **Rotate**, **Scale** and **Stretch**. The size of each window is 1.75x the size of the smaller window next to it. Feel free to add layers if you think it necessary.















3. Open drawing *MyRuler* (created in Lesson 6) or the *Ruler* drawing in the C:\Steps\Lesson09 folder. Create the drawing below. Feel free to add layers if you think it necessary.
  - 3.1. The circles have a 2" radius. The longer lines in the circles are 1/2", and the shorter lines are 1/4".
  - 3.2. The text in the circles and on the ruler is 1/8" high.
  - 3.3. The gradient lines on the ruler are: 3/8", 1/4", 1/8" and 1/16".



4. Now create the following drawings. The Sample Electrical Symbols uses the same border, sheet size, and grid as the previous detail sheets (Lessons 4 & 5). The other drawings will fit on an 11"x17" sheet of paper.



			
<u>Electrolytic Capacitor</u>	<u>Air-Core Inductor</u>	<u>Terminal</u>	<u>Feed-Thru Capacitor</u>
			
<u>Coaxial Cable</u>	<u>Switch</u>	<u>Air-Core Transformer</u>	<u>Transistor</u>
			
<u>Logic Circuit</u>	<u>Incandescent Lamp</u>	<u>Coaxial Connector</u>	<u>Multi-Movable Connector</u>
<b>North Harris College</b>			
<u>Sample Electrical Symbols</u>			
<u>Drawn By:</u> [username]	<u>Checked By:</u> B. Franklin	<u>Page 16</u> of <u>20</u>	
<u>Date:</u> [date]	<u>Scale:</u> NTC	<u>Approval:</u> FTR	<u>File:</u> 2 of 2

List the three commands that can make identical copies of AutoCAD objects.

- 1.
- 2.
- 3.
4. Which command would you use to create parallel or concentric circles?
5. Using the distance option of the Offset command enables you to specify the (linear, perpendicular) distance between the original object and its copy.
6. The \_\_\_\_\_ command will make a reversed copy of the original objects selected.
7. (T or F) The Offset command contains an option that allows you to place copies on the layer that is current when the copies are made.
8. (T or F) Offset can only copy a single object at a time.
9. The \_\_\_\_\_ option of the Array command will place objects in a circle or arc.

By default, AutoCAD will mirror all objects except (10) unless the (11) sysvar is set to one.

- 10.
- 11.

Use either the (12) or the (13) command to make an object longer.

- 12.
- 13.

14. Objects to be stretched must be selected using a \_\_\_\_\_.

Use the (15) option of the (16) command to make a line half as long as it is.

- 15.
- 16.

To make an existing line exactly 5" long, use the (17) option of the (18) command.







- 17.
- 18.

19. To lengthen more than one object at a time, use the \_\_\_\_\_ command.

20. Use the \_\_\_\_\_ command to adjust the angle of an object.

21. Use the \_\_\_\_\_ command to adjust the size of an object.

Identify these buttons and the hotkeys that are associated with their commands.

<b>Button</b>						
<b>Command</b>	22.	24.	26.	28.	30.	32.
<b>Hotkey</b>	23.	25.	27.	29.	31.	33.

34. The Through option of the Offset command relates to
  - a. completing the Offset command
  - b. completing work in the current drawing session only
  - c. a point through which a copy of the offset object will pass
35. (T or F) When using the Through option of the Offset command, a location may be given via a Cartesian coordinate entry.
36. (T or F) When the user has specified a distance in response to the initial Offset prompt, he still must pick a direction for the offset.
37. (T or F) Offset is a repetitive command. That is, it continues until the user hits enter to complete it.
38. (T or F) The Array command will not only give the user many copies, but will place the copies in ranks or circles.
39. (T or F) The Angle to fill of the defining arc or circle of a Polar Array is always counter-clockwise.
40. (T or F) Use the PolArray command for Polar Arrays and the RecArray command for rectangular arrays.
41. (T or F) In the Array command dialog box, “Rotate objects as copied” means that the top part of any object will remain on top for each of the copies.
42. (T or F) The Polar option of the Array command requires that the user identify the distance between rows and columns.
43. Use the \_\_\_\_\_ command to create a revision cloud.
44. (T or F) You can create a revision cloud with a calligraphy style.
45. (T or F) The revision cloud command includes options for Arc Length, selecting an Object to convert to a cloud, and insertion of a Revision Triangle.

## Answers

- |   |              |
|---|--------------|
| 1. Copy                                     | 23. Mi       |
| 2. Offset                                   | 24. Offset   |
| 3. Array                                    | 25. O        |
| 4. Offset                                   | 26. Array    |
| 5. Perpendicular                            | 27. Ar       |
| 6. Mirror                                   | 28. Scale    |
| 7. T  | 29. Sc       |
| 8. T  | 30. Stretch  |
| 9. Polar                                    | 31. S        |
| 10. Text                                    | 32. Rotate   |
| 11. Mirrertext                              | 33. Ro       |
| 12. Stretch                                 | 34. c        |
| 13. Lengthen                                | 35. T        |
| 14. Crossing window or crossing-<br>polygon | 36. T        |
| 15. Percent                                 | 37. T        |
| 16. Lengthen                                | 38. T        |
| 17. Total                                   | 39. F        |
| 18. Lengthen                                | 40. F        |
| 19. Stretch                                 | 41. F        |
| 20. Rotate                                  | 42. F        |
| 21. Scale                                   | 43. Revcloud |
| 22. Mirror                                  | 44. T        |
|   | 45. F        |