

**3D AutoCAD 2010: One Step at a Time**  
**Lesson 1: "Z" Basics**

**10R13D**

**Review Questions**

Please write your answers on a separate sheet of paper.

1. Who was Mr. Woopie?

2. \_\_\_\_\_ refers to the area above and below a drawing board.

Use the (3) icon or the (4) to help determine where you are in a 3-dimensional drawing.

3.

4.

Use the (5) option of the (6) command to require the UCS Icon to remain at the 0,0,0 coordinate regardless of the display.

5.

6.

7. To turn the UCS icon off in all viewports, you must first select the \_\_\_\_\_ option of the UCSIcon command.

8. An \_\_\_\_\_ view is when the absolute value of the all three axes is the same.

9. What type of view results from a viewpoint ratio of 1,-2,1?

10. What is the viewpoint ratio in a plan view?

11. Write the coordinate ratio for a rear elevation.

12. through 14. List three ways to set the viewpoint.

15. Use the \_\_\_\_\_ command to return to a viewpoint of 0,0,1 (a plan view) from anywhere in z-space.

16. Write the formula for entering spherical coordinates.

17. Write the formula for entering cylindrical coordinates.

18. (T or F) Ortho works only on the XY-plane.

19. (T or F) Object and Polar Tracking work only on the XY-plane.

20. (T or F) OSNAPs work only on the XY-plane.

21. \_\_\_\_\_ is that property of an object that takes it from stick figure to a model object.

22. The \_\_\_\_\_ command enables the user to set the thickness and elevation system variables at one time.

23. Use the \_\_\_\_\_ palette to change the thickness or elevation of an existing object.

24. (T or F) The Hide command removes lines drawn using the hidden line type.

25. Use the \_\_\_\_\_ visual style to clear any shading in the model.

26. (T or F) The UCS button or the UCSIcon command may be entered to activate the UCSIcon command.
27. (T or F) Disabling the ORigin option of the UCSIcon command makes the icon move to the 0,0,0 coordinates.
28. (T or F) Use the Off option of the UCSIcon command to remove the icon from the active viewport only.
29. (T or F) When the vpoint command is given, the coordinates of the current view appear on the command line after the word VIEWDIR=.
30. (T or F) The "Set to Plan View" button in the Viewpoint presets Dialog Box, returns the drawing to a normal 2-Dimension view of the drawing.
31. (T or F) In the Viewpoint Presets dialog box, the full compass sets the 2-D angle (in the XY plane) while the half compass sets the 3-D angle (from the XY plane).
32. (T or F) The World option of the Plan command returns the model to a normal 2-D plan view.
33. (T or F) There is only one way to set the angles in the viewpoint presets box and that is with the mouse selection on the compasses.
34. (T or F) The Elev command will permit the user to set both the elevation and thickness as will the Thickness command.
35. (T or F) When the user is finished with the Thickness and Elevation commands, they should be reset to 0.
36. (T or F) After the Elevation system variable is set, a Z axis location is still required even if the Z value is the same as the Elevation setting.
37. (T or F) When Start Z is selected from the Geometry section of the Properties Manager, a pick button appears making it possible to select and redefine the location of selected objects.
38. Use the \_\_\_\_\_ command to change the workspace from AutoCAD's classic screen to the 3D Modeling workspace.
39. (T or F) In the 3D Modeling workspace, AutoCAD adds ribbon panels specific to 3D work.

When using the camera approach to adjusting your view, you must first identify which two locations?

40.

41.

List the five default visual styles.

42.

45.

43.

46.

44.

47. Use the \_\_\_\_\_ command to save the current visual style setup.

48. The \_\_\_\_\_ system variable controls the opacity of objects.

49. The \_\_\_\_\_ system variable controls shadows in a drawing.
50. Use the \_\_\_\_\_ command to display the View Cube.
51. (T or F) You cannot use the ViewCube to "orbit" a drawing.
52. (T or F) When you use the click method on the View Cube, you automatically zoom extents.  
You can, however, change this default behavior using the View Cube Settings dialog box.
53. The right hand rule
- a) means you must work right-handed when in 3D space
  - b) is another means for navigating in z-space
  - c) means you can use the right hand mouse button to orbit in z-space

### Answers:

1. Cartoon professor who helped Tennessee Tuxedo
2. Z-space
3. UCS
4. View Cube
5. Origin
6. Ucsicon
7. All
8. Isometric
9. dimetric
10. 0,0,1
11. 0,1,0
12. command line
13. camera
14. dialog box
15. plan
16. @dist<Xyangle<Zangle
17. @dist<Xyangle,Z-dist
18. F
19. F
20. F
21. thickness
22. elev
23. property
24. F
25. 2D Wireframe
26. F
27. T
28. T
29. T
30. T
31. T
32. T
33. F
34. F
35. T
36. F
37. T
38. WSCurrent
39. T
40. Camera
41. Target
42. 2D Wireframe
43. 3D Hidden
44. 3D Wireframe
45. Conceptual
46. Realistic
47. VSSave
48. VSFaceCapacity
49. VSShadows
50. NavvCube
51. F
52. T
53. b