

## 3D AutoCAD 2006: One Step at a Time

### Review Questions – Lesson 4

4.7

#### Review Questions

Answer these questions on a separate sheet of paper.

1. through 8. List the eight predefined Surface Models.
9. Surface Models are created as \_\_\_\_\_.
10. When exploded, a Surface Model becomes a series of \_\_\_\_\_.
11. Commands used to create predefined Surface Models must be preceded with the characters \_\_\_\_\_.
12. Use the \_\_\_\_\_ command to draw any six-sided box whose sides, top, and bottom are parallel or perpendicular to the current UCS.
13. A \_\_\_\_\_ is a box whose sides, top, and bottom are all equal.
14. When drawing a wedge, you can change the \_\_\_\_\_ to help control the direction of the slope.
15. through 18. List the four types of pyramid you can draw in AutoCAD.
19. A \_\_\_\_\_ is a pyramid with only four triangles.
20. All pyramids are \_\_\_\_\_.
21. The top of a pointed pyramid is called the \_\_\_\_\_.
22. An AutoCAD pyramid with two triangles, two quadrilaterals, and a rectangular base is called a \_\_\_\_\_.
23. (T or F) It is possible to draw a pyramid with a larger top than base.
24. (T or F) A cone's top must be smaller than its base.
25. (T or F) To point a cone downward, simply make the height a negative number.
26. A \_\_\_\_\_ is the upper half of a sphere.
27. A \_\_\_\_\_ is the lower half of a sphere.
28. A \_\_\_\_\_ looks like the inner tube of a truck tire.
29. (T or F) You can use the fillet command to soften the edges of a box.
30. (T or F) You can create concentric spheres with the offset command.
31. (T or F) You can create multiple copies of a pyramid with the array command.
32. (T or F) You can remove part of a sphere by exploding it and erasing the 3DFaces.

33. (T or F) Predefined Surface Models may be accessed through the 3D command.
34. (T or F) Predefined Surface Models are solid models.
35. (T or F) There are ten geometric objects accessible through the 3D command: barrel, box, cone, dish, dome, mesh, pyramid, sphere, torus, and wedge.
36. (T or F) Typing ai\_box is one way to activate an Autodesk Incorporated lisp routine for a surface box.
37. (T or F) In the command ai\_cone, the user can't change the number of surface segments defining a cone.
38. (T or F) The creation of 3D Surface Domes, Dishes, and Spheres requires not only a radius, but the number of longitudinal and latitudinal segments for the surface of the 3D object.
39. (T or F) An exploded 3D face cannot be easily modified, trimmed, extended, filleted, chamfered, broken, lengthened, or (worst of all) offset.
40. (T or F) 3D Faces like 3D Meshes have wall thickness.
41. (T or F) OSNAPs will work on surface Models.
42. (T or F) Surface Models can't be mated together to form one object.

**Answers:**

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|-------------|-----------------|-------|
| 1. Box      | 15. Pyramid     | 29. F |
| 2. Wedge    | 16. Ridge       | 30. F |
| 3. Pyramid  | 17. Tetrahedron | 31. T |
| 4. Cone     | 18. Flat Top    | 32. T |
| 5. Sphere   | 19. Tetrahedron | 33. T |
| 6. Dome     | 20. Polyhedrons | 34. F |
| 7. Dish     | 21. Apex        | 35. F |
| 8. Torus    | 22. Ridge       | 36. T |
| 9. 3Dmeshes | 23. T           | 37. F |
| 10. 3DFace  | 24. F           | 38. T |
| 11. AI_     | 25. F           | 39. T |
| 12. AI_Box  | 26. Dome        | 40. F |
| 13. Cube    | 27. Dish        | 41. F |
| 14. UCS     | 28. Torus       | 42. T |