

Name two advanced complex Surface Modeling commands?

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22. (T or F) When using the 3DMesh command, the user must manually identify every vertex on the object he is creating.

When using the 3DMesh command, if you wanted 5 columns of faces, you would enter the size of mesh (23) as (24).

23.

24.

25. (T or F) SurfTab1 deals with the number of surfaces AutoCAD will use to create the circumference of a round or arced object while SurfTab2 deals with the latitudinal sections defining a sphere or dish.

26. (T or F) SurfTab1 and SurfTab2 define the shape of the object by their density.

27. In building the train engine's tank with Tabsurf, the user had to: 1) set a new value for Tabsurf, 2) select the path curve or shape for the boiler, 3) identify the path or direction the surfaces were to go, 4) all of the above.

28. (T or F) The UCS should always be aligned with the path the user wants Tabsurf to follow.

29. (T or F) In building the engine's tank, it was required that we change the value for the SurfTab1 system variable.

30. (T or F) Rulesurf is useful for placing a surface between two uneven objects.

31. (T or F) If the user has trouble selecting the edges in Rulesurf, or the results are undesirable, then zoom in closer to the object and try again.

32. (T or F) The SurfTab1 and SurfTab2 system variables do not affect the results of the Revsurf command.

33. (T or F) Revsurf, like Tabsurf, does not require the manipulation of the UCS.

34. (T or F) Any type of line may be used in Revsurf to achieve professional results.

35. (T or F) The user may ignore the UCS as it does not affect Revsurf.

36. Edgesurf creates: 1) a round surface, 2) a surface plane, 3) a flat only surface along the x, y, or z planes.

37. (T or F) To create a surface using Edgesurf, the four boundary lines need to be selected before SurfTab1 and SurfTab2 are set.

38. (T or F) Splines make good edges when defining a more elaborate surface with the Edgesurf command.

39. (T or F) Edgesurf creates a surface plane, which may or may not go in the x, y, and z planes.
40. (T or F) In creating a 3DMesh with five rows and five columns of faces, you should set the mesh size M and N to five.
41. (T or F) The sequential order must be maintained in specifying the Vortex Location Nodes of a 3DMesh.
42. (T or F) The UCS is an important consideration in defining the rows "M" and the columns "N".
43. (T or F) Because of its complexity, the 3DMesh command makes a better tool for programmers than for everyday CAD users.
44. The command you'd use to create a complex surface by identifying just a guide and path is _____.
45. Convert an existing object to a planar surface using the _____ command.
46. (T or F) When using the Object option of the Planesurf command, the object must be on the XY plane of the current UCS.

Answers:

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| 1. Surftab1 | 18. Revsurf | 31. T |
| 2. Surftab2 | 19. F | 32. F |
| 3. T | 20. 3DMesh, | 33. T |
| 4. Tabsurf | Planesurf, Loft, | 34. F |
| 5. Edgesurf | or 3DFace | 35. T |
| 6. Rulesurf | 21. 3DMesh, | 36. 2 |
| 7. Revsurf | Planesurf, Loft, | 37. F |
| 8. Basic shape | or 3DFace | 38. T |
| 9. Path | 22. T | 39. T |
| 10. 60 | 23. M | 40. F |
| 11. F | 24. 6 | 41. T |
| 12. Current layer | 25. T | 42. F |
| 13. T | 26. T | 43. T |
| 14. T | 27. 4 | 44. Loft |
| 15. Single object | 28. F | 45. Planesurf |
| 16. Revsurf | 29. F | 46. F |
| 17. Edgesurf | 30. T | |