

3D AutoCAD 2010: One Step at a Time
Lesson 7: Mesh Editing

10R7-3D

Review Questions

Answer the following questions on a separate sheet of paper.

1. Collectively, _____ make up a mesh.
2. (T or F) When working with models, you will likely find it necessary to use mesh editing tools sometimes and solid editing tools other times.
3. (T or F) As a general rule, edit your mesh before you apply a smoothness level.

List the three selection filters you can use on a mesh.

- 4.
- 5.
- 6.

List the three ways you can change the selection filter.

- 7.
- 8.
- 9.
10. (T or F) You can change the modification gizmo without issuing a command.
11. (T or F) Using a modification gizmo to move or rotate objects involves grips.
12. (T or F) Finer editing is done on the face level than the vertex level.
13. Use the _____ command to provide two faces where you had one.
14. (T or F) Refining an entire mesh is almost always preferable to splitting a face.
15. (T or F) Extruding a face also adds new faces to a mesh.
16. Use the _____ command to move a face without distorting adjacent faces.
17. You can force an extruded face to follow a specific route by choosing the _____ option of the Extrude command.
18. Use the _____ property to turn a faceted object into a smooth "free-form" (aka. organic) design.

Increase (19) or decrease (20) the smoothness level of an object with these commands.

- 19.
- 20.
21. To avoid smoothing an entire object, use the _____ command on selected edges.
22. (T or F) The smoothness level affects the number of faces produced by the MeshRefine command.

When converting a model to a mesh or solid, you'll need to set the SmoothMeshConvert system variable. What are the four settings and their outcomes.

23.

24.

25.

26.

27. (T or F) Use the ConvToMesh command to convert a solid to a mesh.

28. Use the _____ command to create a wireframe from a mesh or solid.

Answers:

1. 3d faces or surfaces
2. T
3. T
4. Face
5. Edge
6. Vertex
7. Subobject panel
8. Cursor menu
9. SubObjSelectionMode setting
10. T
11. T
12. F
13. MeshSplit
14. F
15. T
16. Extrude
17. Path
18. Smoothness
19. MeshSmoothMore
20. MeshSmoothLess
21. MeshCrease
22. T
- 23 – 26 [see the chart, p.164]
27. F
28. XEdges