

3D AutoCAD 2010: One Step at a Time
Lesson 9: Composite Solids

10R9-3D

Review Questions

Write the answers on a separate sheet of paper.

1. The _____ command behaves like a computer-controlled welding rod.
2. Use the _____ command to remove one solid shape from another.
3. The intersect command
 - a) removes everything that intersects between solids,
 - b) removes everything that does not intersect between solids.
4. Use the _____ command to cut through a solid object as though you are using a knife.
5. When using the Zaxis option of the Slice command, where will the point on the Z-axis (normal) of the plane be?
6. The _____ command will compute the volume of a selected solid object.
7. Which command helps the draftsman find design interferences *before* construction?
8. (T or F) There is no difference between filleting solids and filleting 2-dimensional objects.
9. (T or F) You can change the fillet radius on the fly when filleting solids.
10. (T or F) There is no difference between chamfering solids and chamfering 2-dimensional objects.
11. (T or F) There is no Angle option when chamfering a solid.
12. The _____ command will automatically create cross sections of solid objects.
13. The section that AutoCAD creates is a (solid, region, polyline).
14. Access the Union command by:
 - a) typing Union or Uni
 - b) using the Modify pull down menu
 - c) pick the Union button on the Solid Editing panel
 - d) all of the above.
15. (T or F) After merging two objects with the Union command, it is still possible to erase one of them.
16. (T or F) To create a hole in a solid object, place a cylinder where the hole should go and then subtract the cylinder from the solid object.
17. (T or F) When using the Subtract command, select the object to be removed first.
18. (T or F) While the Fillet command works well on two dimensional objects, you should use the Fillet3D command on solid objects.

19. (T or F) When chamfering a three dimensional solid object, the user must select two surfaces (just as the user must select two edges when chamfering a two dimensional object).
20. To see the section created by the SectionPlane command, you must activate it with the _____ command.
21. One of the differences between the Section and SectionPlane commands is that the _____ command is more dynamic.

Answers:

- | | |
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| 1. Union | 11. T |
| 2. Subtract | 12. Section or SectionPlane |
| 3. b | 13. Region |
| 4. Slice | 14. d |
| 5. "Up" if you are standing on the slicing plane | 15. F |
| 6. MassProp | 16. T |
| 7. Interfere | 17. F |
| 8. F | 18. F |
| 9. T | 19. T |
| 10. F | 20. Livesection |
| | 21. Sectionplane |