

Pre-Course Test Questions

- 1. Have you used CAD software before?
 - a. I have used several different CAD packages.
 - b. I have some experience with CAD software.
 - c. I have heard the term but never used any software.
 - d. I am not familiar with CAD at all.
- 2. How would you best describe your current knowledge in product design?
 - a. I have designed and produced many products before.
 - b. I have designed many products before.
 - c. I would like to learn to design products.
 - d. I have no interest in the subject.
- 3. Do you have any experience with making or repairing household items?
 - a. Yes, I fix everything in my house and build using available materials such as wood.
 - b. I can perform basic repairs but do not build using available materials such as wood.
 - c. I design and build using materials such as wood, but do not repair any household items.
 - d. I don't have any experience with repairing or building things around the house.
- 4. Which best describes your level of knowledge in 3D printing?
 - a. I am familiar with all of the current methods and materials.
 - b. I am familiar with most of the current methods and materials.
 - c. I have limited knowledge in the subject.
 - d. I have no knowledge about 3d printing.
- 5. Are you familiar with the term "Parametric Design"?
 - a. Yes, and I use that to model parts often.
 - b. Yes, and I understand the concept but never used it.
 - c. I have heard the term before but don't know what it means.
 - d. No, I have never heard of Parametric Design before.

Discussion Prompts:

<u>Discussion Prompt</u> – Knowledge Sharing: Learning share their personal experience that might provide additional benefit to the learners.

What are some areas of CAD design that interest you? Example: Car Design.

In Video Question

L1-01 – In Fusion 360, what is the name of the area where your files can be organized and opened from?

- Answer: Data Panel
- File Panel
- File Box
- Data Storage

L1-02 – What is the name of the various areas you access to perform different tasks? Ex: Where do you go to Render?



- Answer: Workspaces
- Work roles
- Work areas
- Professional roles
- L2-01 True/False There are quick keys associated with every tool in Fusion 360.
 - Answer: False
 - True
- **L3-01** What is the name of the panel that appears during a sketch to do things like apply constraints?
 - Answer: Sketch palette
 - Sketch tools
 - Tool dock
 - Sketching dock
- L3-02 What is the name of the drop-down menu where Revolve is located?
 - Answer: Create
 - Modify
 - Assemble
 - Sketch
- **L4-01** True/False –You sketch on the face of a part as long as its planar.
 - Answer: True
 - False
- **L4-02** When creating a sweep, what is the name of the sketch selection used for the cross section of the sweep?
 - Answer: Profile
 - Section
 - Chain
 - Sketch
- **L5-01** What constraint would you use to keep two lines at 90 degrees relative to each other?
 - Answer: Perpendicular
 - Parallel
 - Colinear
 - Coincident
- **L5-02** True/False By default, a component is fixed in 3d space.
 - Answer: False
 - True
- **L6-01** What is it called when you place an image into a file for reference?
 - Answer: Attached Canvas
 - Attached Image



- Sketch Picture
- Sketch Image

L6-02 – What is the name of the subdivided workspace?

- Answer: Sculpt
- Patch
- Mesh
- Subdivided

L6-03 – What tool is used to push and pull vertices of a subdivided body?

- Answer: Edit Form
- Edit Shape
- Move Form
- Move Shape

L7-01 – What is a difference between applying a rigid joint vs. a rigid group?

- Answer: The number of components that can be selected
- The degrees of freedom
- The location in the browser
- They are identical in every way

L7-02 – When you edit the limit of a ball joint, what are the degrees of freedom you can control?

- Answer: Pitch, Yaw and Roll
- Pitch and Yaw
- Pitch and Roll
- Yaw and Roll

L7-03 – When creating a distributed design, what icon is shown over the component in the browser?

- Answer: Chain Link
- Lock
- X
- No additional icon

L8-01 – True/False – A drawing is saved separate from the CAD file.

- Answer: True
- False

L8-02 – Where is an exported PDF of a drawing saved?

- Answer: On your local machine
- · On the cloud
- Both locally and on the cloud
- Either locally of on the cloud

L9-01 – True/False – All appearances are automatically downloaded to a local library?



- Answer: False
- True

L9-02 – What are the two options for setting up a scene background?

- Answer: Environment or Solid Color
- Image or Solid Color
- Environment or Image
- There is only one option

L9-03 – In order to create a cloud processed render you must use what?

- Answer: Cloud Credits
- Graphics Card GPU
- Local RAM
- 1920x1080 resolution

L10-01 – True/False - When exporting an STL file for 3D print you can preview the mesh on screen.

- Answer: True
- False

L11-01 – What Privacy Settings are available when creating a Share Link?

- Answer: Password and allowable download
- Password
- Allow users to download
- There are no options

L11-02 – True/False – You can invite a user to an individual file inside of a project.

- Answer: False
- True

End of Course Questions

- 1. **L3-01** When trying to fully define a sketch, you can use dimensions or what?
 - a. Answer: Constraints
 - b. Relations
 - c. Locations
 - d. References
- 2. **L4-02** To create a swept solid you must have a profile and what else?
 - a. Answer: Path
 - b. Line



- c. Direction
- d. Thickness
- 3. **L5-02** There are multiple ways to create components in Fusion 360 for use in assemblies. Which way below is incorrect?
 - a. Answer: Create a component from a render
 - b. Create an empty component
 - c. Convert a body
 - d. Create a component during a feature
- 4. L6-02 Subdivided bodies are made up of faces, edges and what?
 - a. Answer: Vertices
 - b. Points
 - c. Dots
 - d. Cages
- 5. **L7-02** True/False As-built joints make use of the modeled location of a component.
 - a. Answer: True
 - b. False
- 6. **L8-01** A detailed drawing allows you to create _____ of a product and add dimensions and notes to those _____.
 - a. Answer. Views
 - b. Models
 - c. Adjustments
 - d. Renders
- 7. **L9-01** True/False Once an appearance is applied it can't be edited.
 - a. Answer. False
 - b. True
- 8. **L9-03** True/False A turn-table render can only be complete after a still image is rendered.
 - a. Answer. True
 - b. False
- 9. **L10-01** What file type is exported for 3D printing?
 - a. Answer. STL
 - b. PNG
 - c. IGES
 - d. XT
- 10. L11-01 Where do you start a Live Review session from?
 - a. Answer. File menu
 - b. Marking menu



- c. Browser
- d. Create drop-down