

1. What is the first thing we should set up in Autodesk Inventor when creating a new model?  
**Create a New Project**
2. Describe the general parametric modeling procedure.
 

<ol style="list-style-type: none"> <li>a. <b>rough two-dimensional sketch</b></li> <li>b. <b>constraints and dimensions</b></li> <li>c. <b>Extrude, revolve, or sweep</b></li> </ol>	<ol style="list-style-type: none"> <li>d. <b>Add additional parametric features</b></li> <li>e. <b>Perform analyses</b></li> <li>f. <b>Drawing views</b></li> </ol>
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3. Describe the general guidelines in creating Rough Sketches.
 

<ol style="list-style-type: none"> <li>a. <b>Sketch /proportional to the desired shape.</b></li> <li>b. <b>Keep the sketches simple.</b></li> </ol>	<ol style="list-style-type: none"> <li>c. <b>Exaggerate the geometric features.</b></li> <li>d. <b>Geometry does not overlap.</b></li> <li>e. <b>Should form a closed region.</b></li> </ol>
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4. What is the main difference between a rough sketch and a profile?  
**a. Rough sketch is not precise, while a profile is precise**
5. List two of the geometric constraint symbols used by Autodesk Inventor.
 

<ol style="list-style-type: none"> <li>a. Coincident</li> <li>b. Colinear</li> <li>c. Concentric</li> <li>d. Fix</li> <li>e. Parallel</li> <li>f. Vertical</li> </ol>	<ol style="list-style-type: none"> <li>g. Horizontal</li> <li>h. Tangent</li> <li>i. Smooth</li> <li>j. Symmetric</li> <li>Equal</li> </ol>
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6. What was the first feature we created in this lesson? **Extrude**
7. How many solid features were created in the tutorial? **Four**
8. How do we control the size of a feature in parametric modeling? **Extents**
9. Which command was used to create the last cut feature in the tutorial? **Extrude** How many dimensions do we need to fully describe the cut feature? **Two**
10. List and describe three differences between parametric modeling and traditional 2D Computer Aided Drafting techniques.
  - a. Feature-Based rather than Drawing -Based
  - b. Shape before size rather than precise dimensioning from the start
  - c. Analysis includes all views, as opposed to analyzing one view at time.
  - d. Corrections and adjustments are propagated through the entire design, from parts to assemblies to drawings, as opposed to having to make individual adjustments to each part, assembly and drawing.