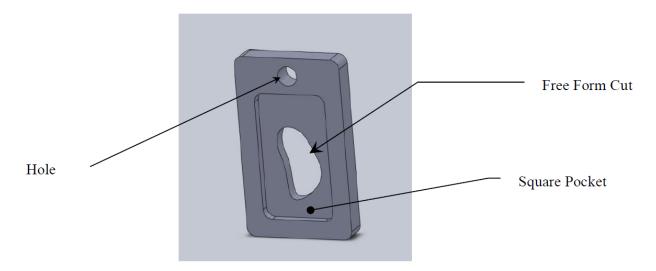
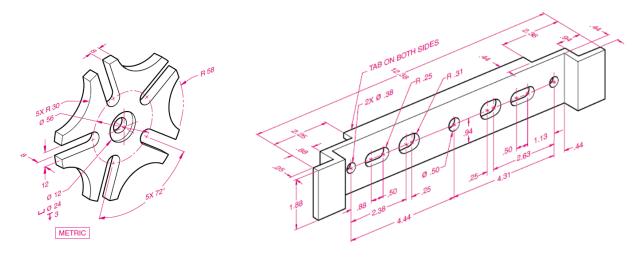
Sample of Practice Problems for the topics to be covered in EGR 113

Introduction to CAD/CAM process

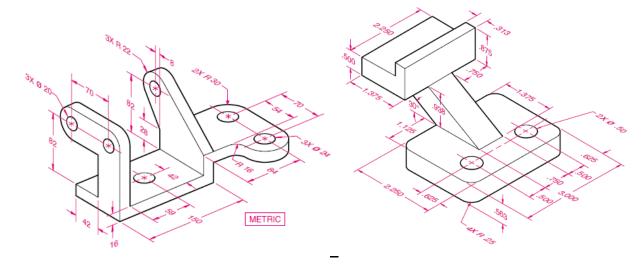
- 1. Create a model of the keychain using the SolidWorks software.
- 2. Create a part program using SolidCAM. A part program is a set of instructions that direct the CNC milling machine to move the cutter and the workpiece to machine the keychain.
- 3. Use a CNC milling machine to create the keychain from the workpiece.



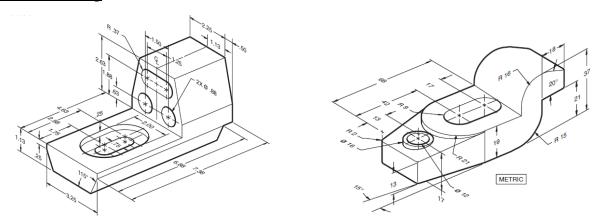
Parametric Modeling



Constructive Solid Geometry Concepts

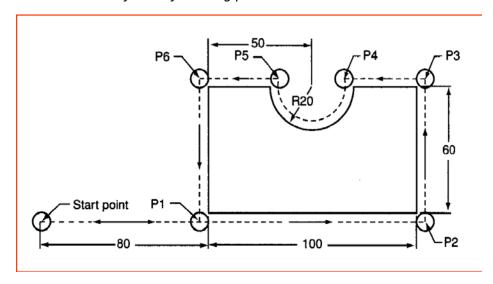


Basic Modeling

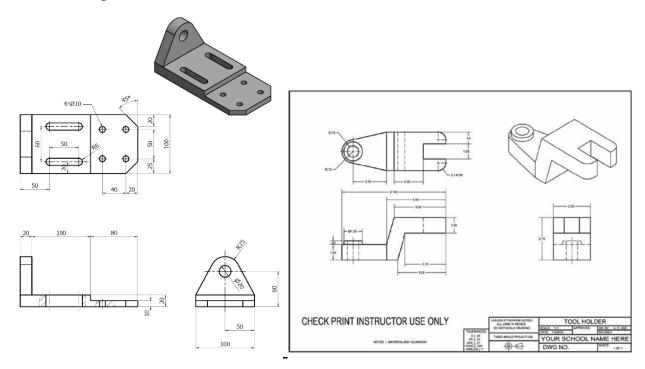


CNC Manufacturing:

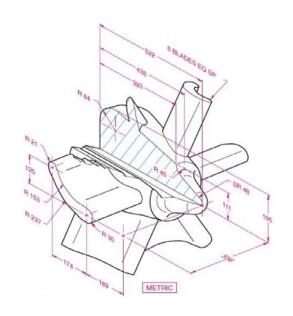
Create a G-Code for the following part :

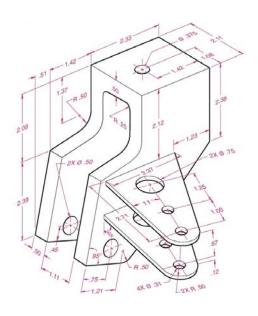


Part Drawings:



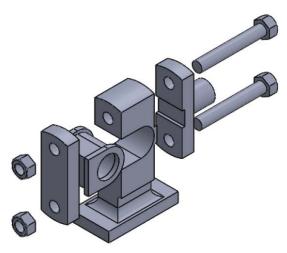
Advanced Modeling



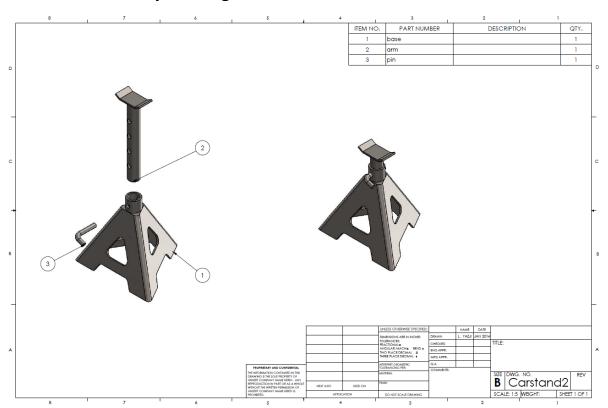


Assembly Modeling

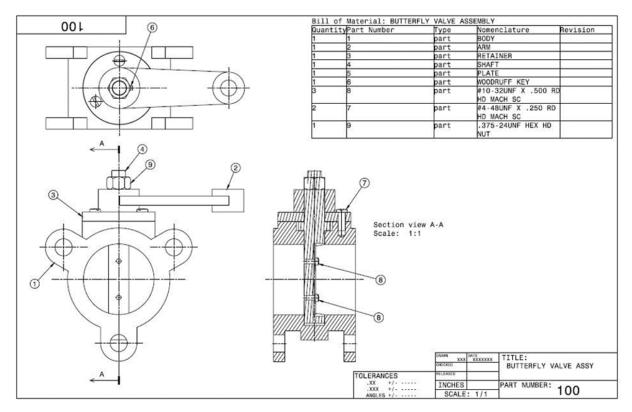
Create all components of the Crosshead assembly and then assemble them, as shown in the following figure. The exploded view of the assembly is shown in here. The dimension of the components will be provided.



Create the assembly drawing for the car stand as shown.

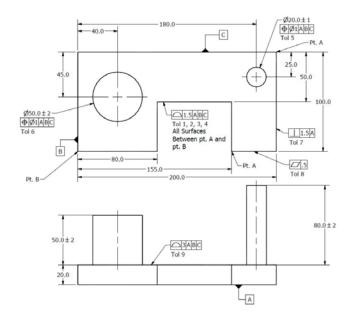


Working Drawings:



Geometric Dimensioning and Tolerancing:

- Create the model in SolidWorks then create a drawing as shown below.
- Fully dimension your drawing and all the views in it.
- Apply the GD&T symbols in your drawing.



For the given solid model, create the drawing:

