G-Code Coding Assignment

Directions: Write a G-code program in ncviewer.com for the following:

- L-Block
- U-Block
- Bracket
- Tool Rest

Be sure to also include the following code:

- Homing position: adjust the homing position based on the part. Be sure the home position is above and away from the part by a minimum of 30 mm.
- Tool path: consider the direction of the tool path. Limit the number of times that the tool traces over the same line. (Hint: move the tool off the part and reposition using G00 to avoid tracing any lines). Mark any traced lines with a comment within the code.

You may consider turning the grid off as parts will be larger than the given grid. Go to Backplotter Settings > Show Grid
Part 1: L-Block
References: Origin and coordinate points.
Part: metric
Part 2: U-Block
References: Dimensions of the part.
Step 1: Determine the origin point.
Step 2: Convert dimensions into coordinate points.
Step 3: Write the program.
Part: metric
Part 3: Bracket

References: Dimensions of the part.
Step 1: Determine the origin point.
Step 2: Convert dimensions into coordinate points.
Step 3: Write the program

NOTE: To create arcs, adjust code to G18 (z- and x-axis). Use the I,J,K method in G-Codes Basics Tutorial.

Part: metric
Part 4: Tool Rest

References: Dimensions of the part.
Step 1: Determine the origin Point
Step 2: Convert dimensions into coordinate points.
Step 3: Write the program.

Part: inches