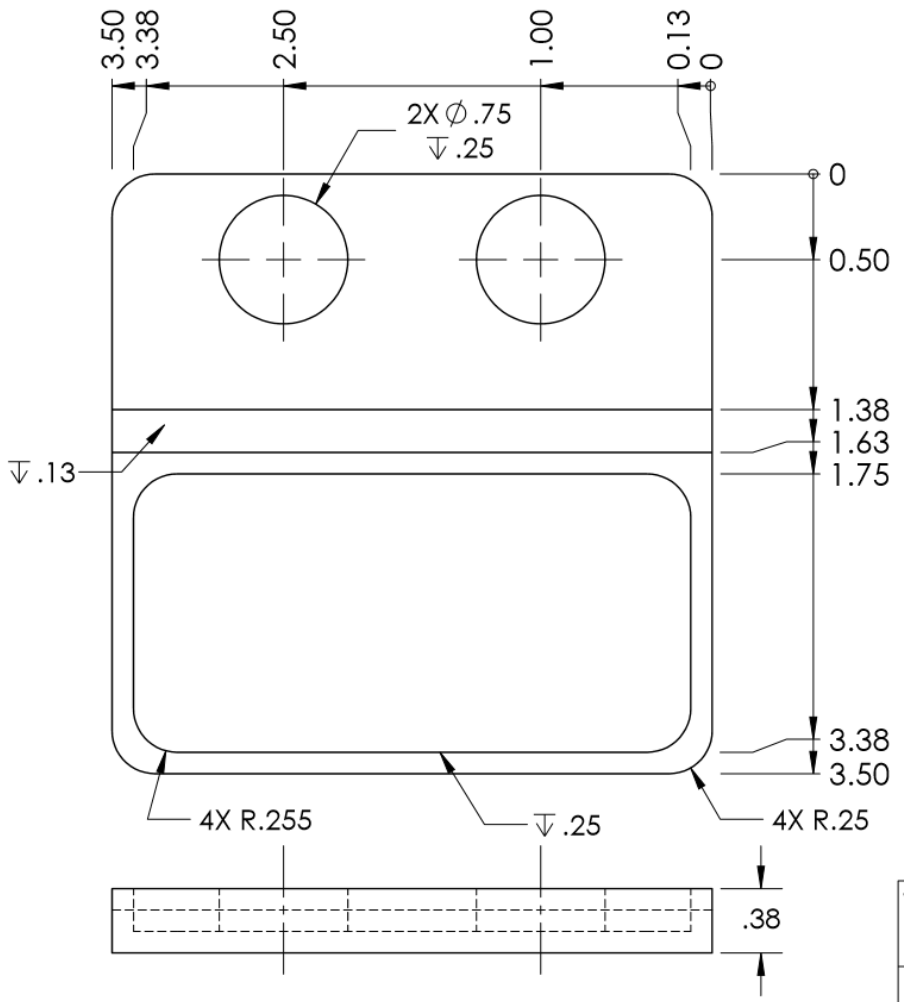
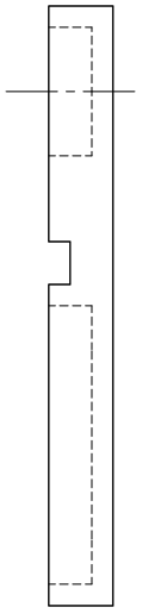
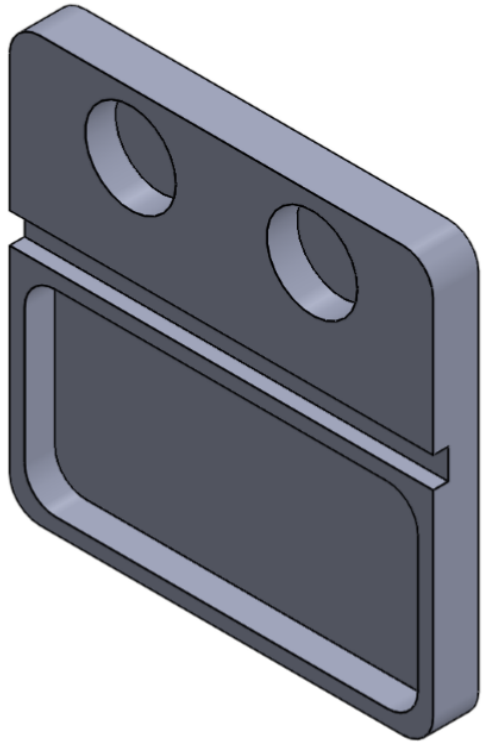
Drawing Requirements and Suggestions

30 August 2018







NOTES:
- DIMENSIONS IN INCHES
- DEBURR SHARP EDGES
- THIRD ANGLE PROJECTION

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TOLERANCES (UNLESS OTHERWISE NOTED)	PROJECT OR CLASS: MEEG 304 MACHINE DESIGN	
DECIMAL .XXX ± .005 .XX ± .010 .X ± .050	DRAWING TITLE: CNC PROJECT- DESK ORGANIZER	
	DRAWN BY: L. SZEWCZAK	DATE: 03/06/2017
	CHECKED BY:	DATE:
FRACTIONAL ± 1/32	APPROVED BY: J. Glancey	DATE:
	MATERIAL: ALUMINUM	QUANTITY: 1
ANGULAR ± 0.5 DEG	SCALE: 1:1	DWG NO: 1 OF 1
	BILLING ACCOUNT:	

Grading

- Points for each drawing element and total grade shown on your page.
- Total grade is circled at the bottom.

Elements of a Good Engineering Drawing:

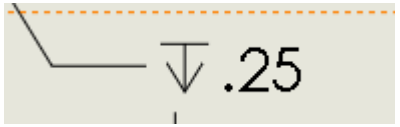
- Title Block and Notes (20)
- Orthographic and Isometric Views (10)
- Dimensions (40)
- Features / Machinable (20)
- Overall Neatness (10)

Standard Drawing Practices

- Apply the standard drawing practices introduced in MEEG 202 to your plate drawing.
- Refer to the Drawing Practices documents in the Canvas folder for the Machine Shop Project.

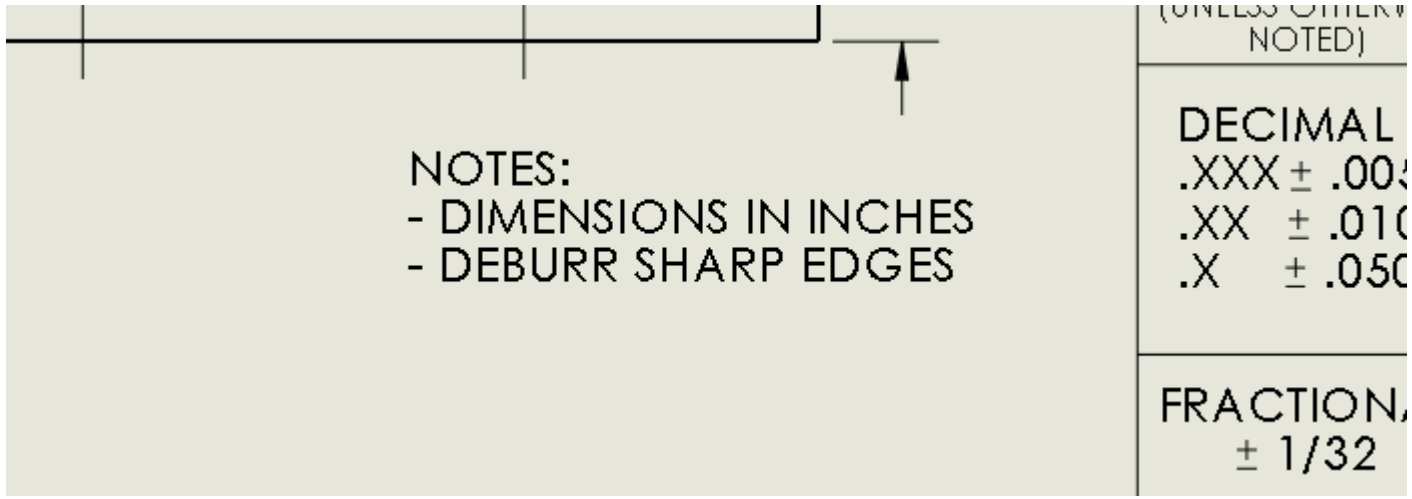
Tips and Tricks

Details on the Slides that Follow

- What notes to use
- How to remove tangent edge lines
- How to use ordinate dimension
- How to remove leaders from part views
- Where to find the depth callout symbol: 

- What a correct isometric view should look like

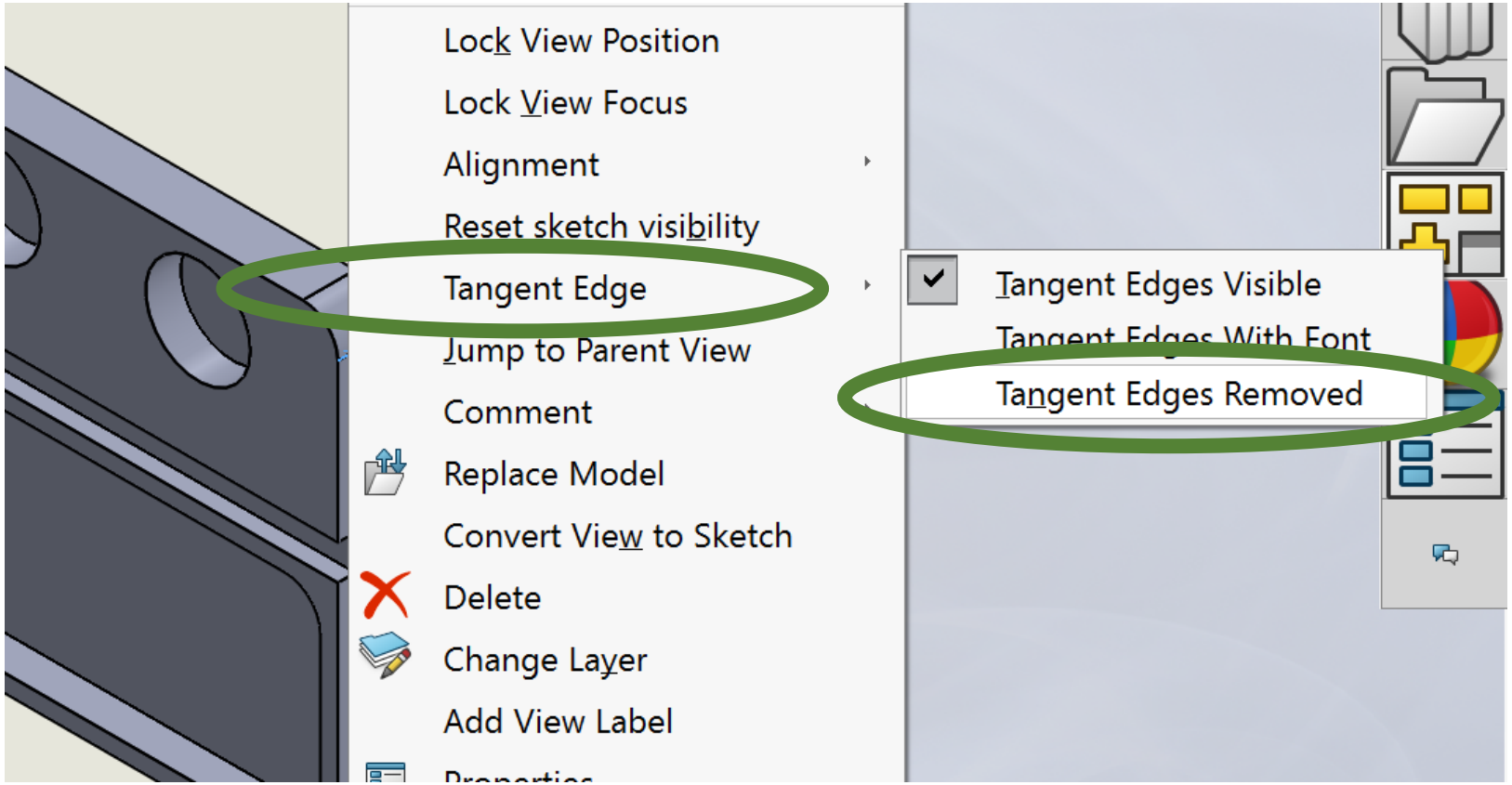
What notes to use



Everyone’s drawing needs these two notes included (worth 10 points total).

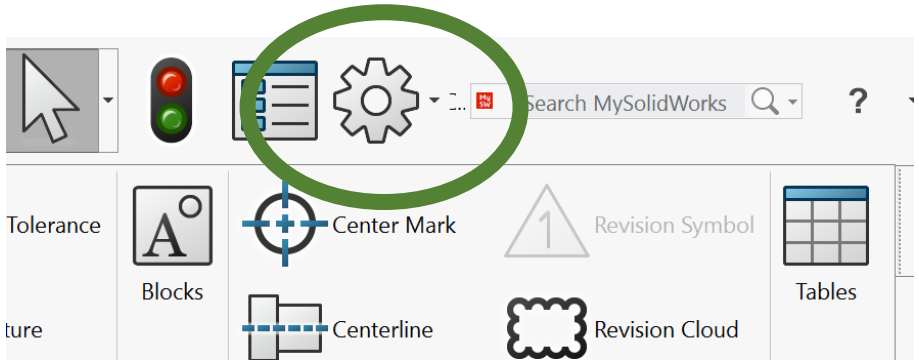
How to remove tangent edge lines: Method 1

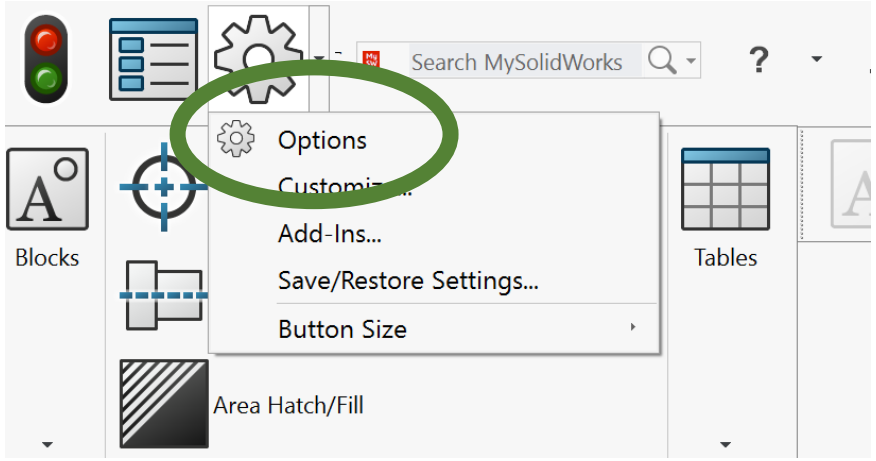
Right-click on tangent edge line > Tangent Edge > Tangent Edge Removed

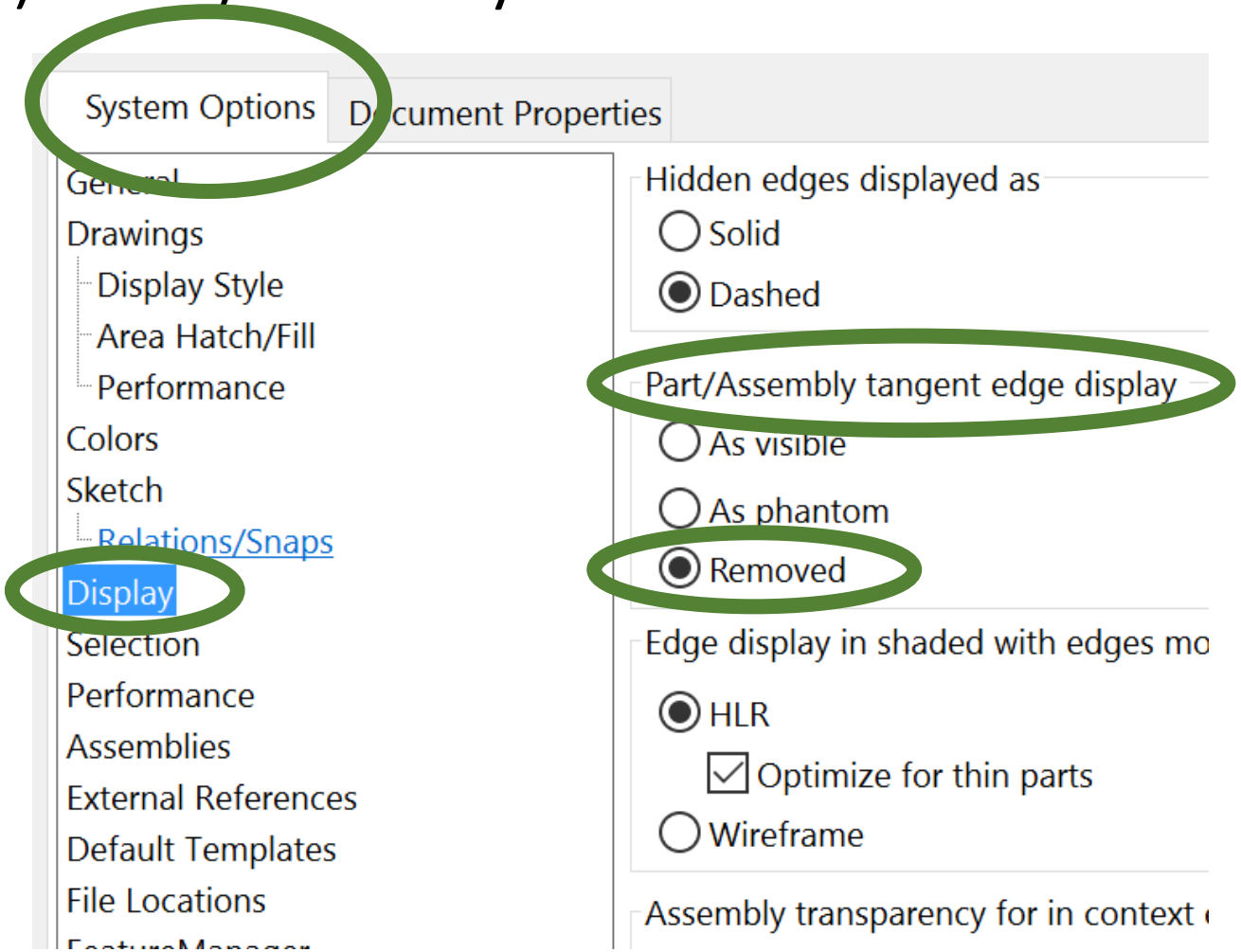


How to remove tangent edge lines: Method 2

- Click on gear in top bar > Options > System Options > Display (or Display/Selections) > Part/Assembly Tangent Edge > Removed

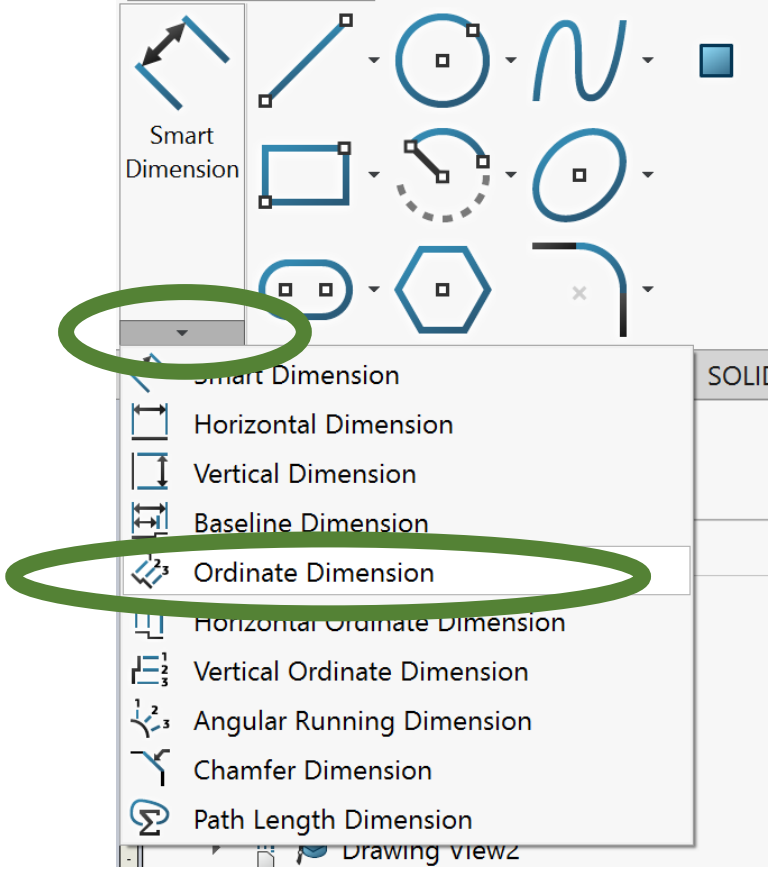






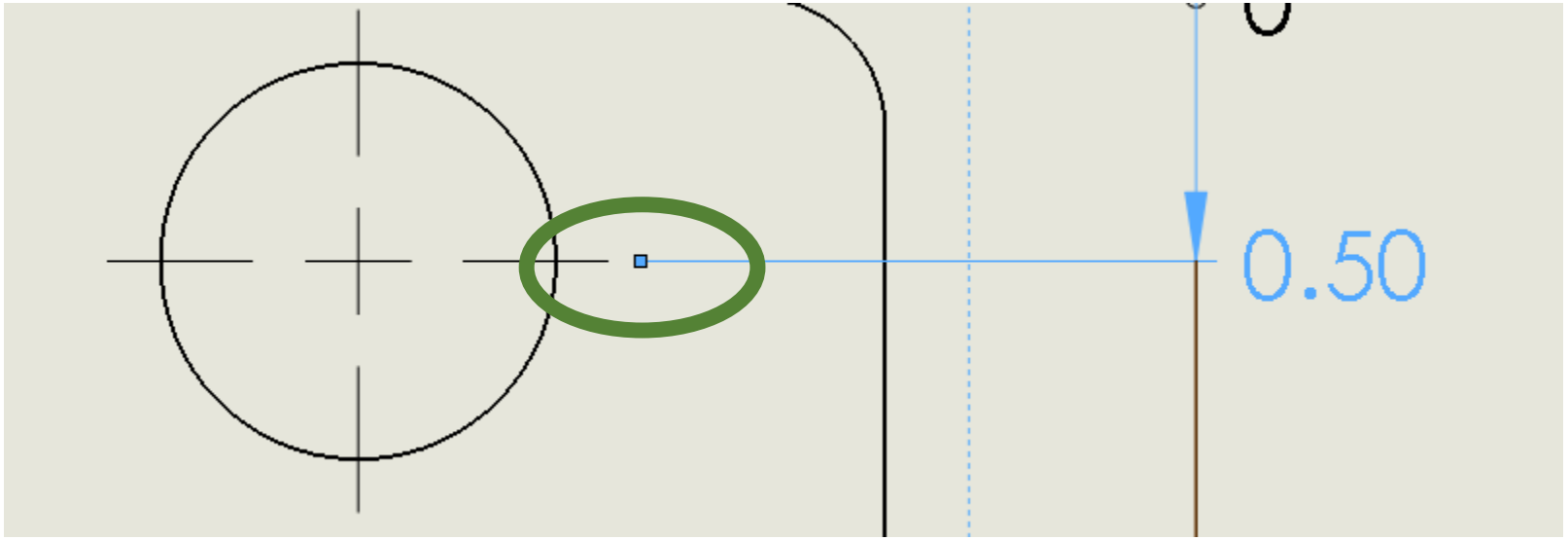
How to Use Ordinate Dimension

- Click on drop down under Smart Dimension > Click “Ordinate Dimension” > Click on Zero line (0,0 measurement) > Click on each measurement



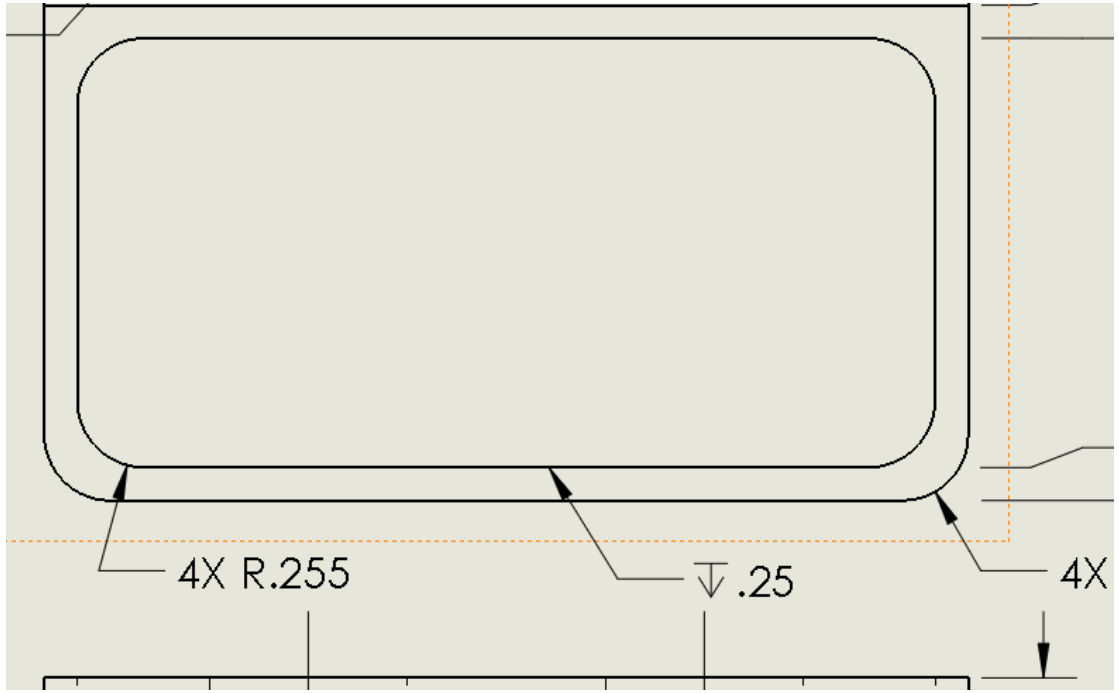
How to remove leaders from part views

- Click on measurement > Click on blue dot> Drag off part

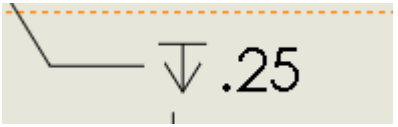


Where to find the depth callout symbol

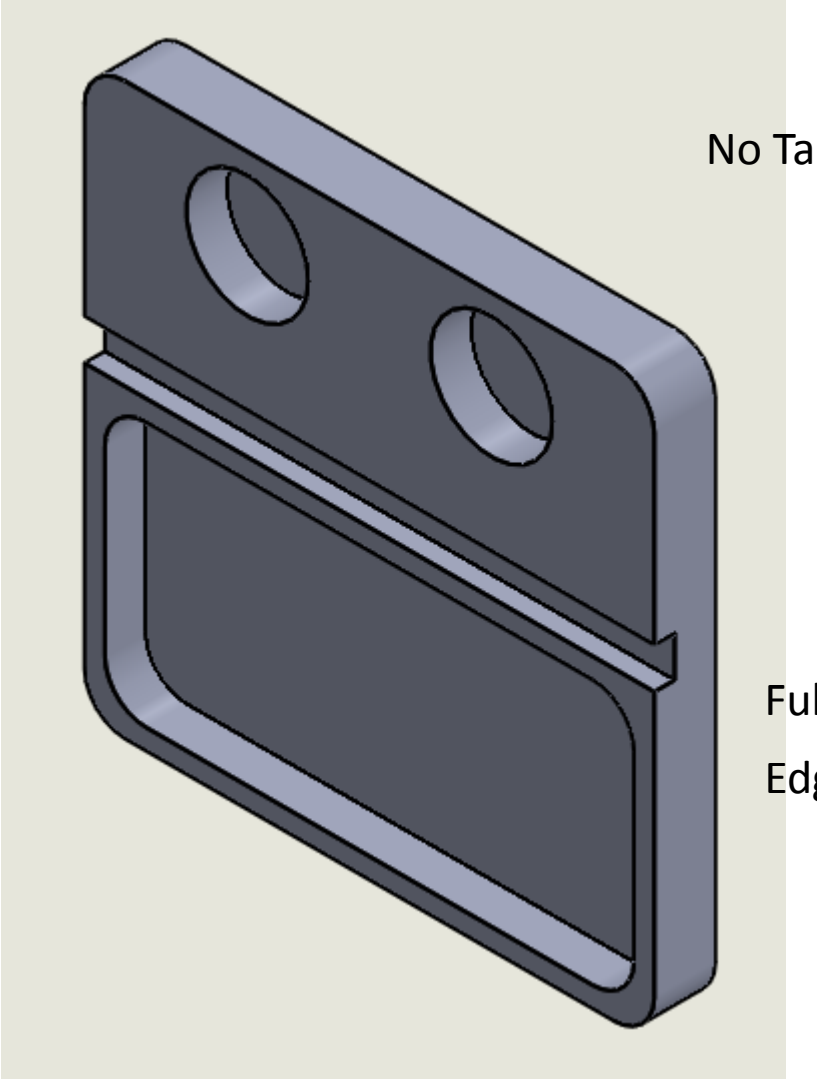
Many feature needs a depth Call-out



- To get the depth symbol:
  - Label feature with an annotation
  - Type: <HOLE-DEPTH> .25
  - Will look auto-fill to:



What a correct isometric view should look like

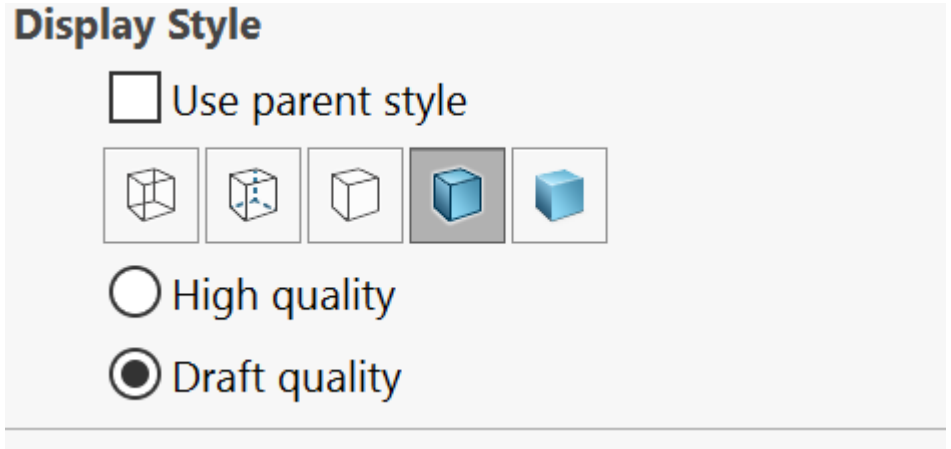


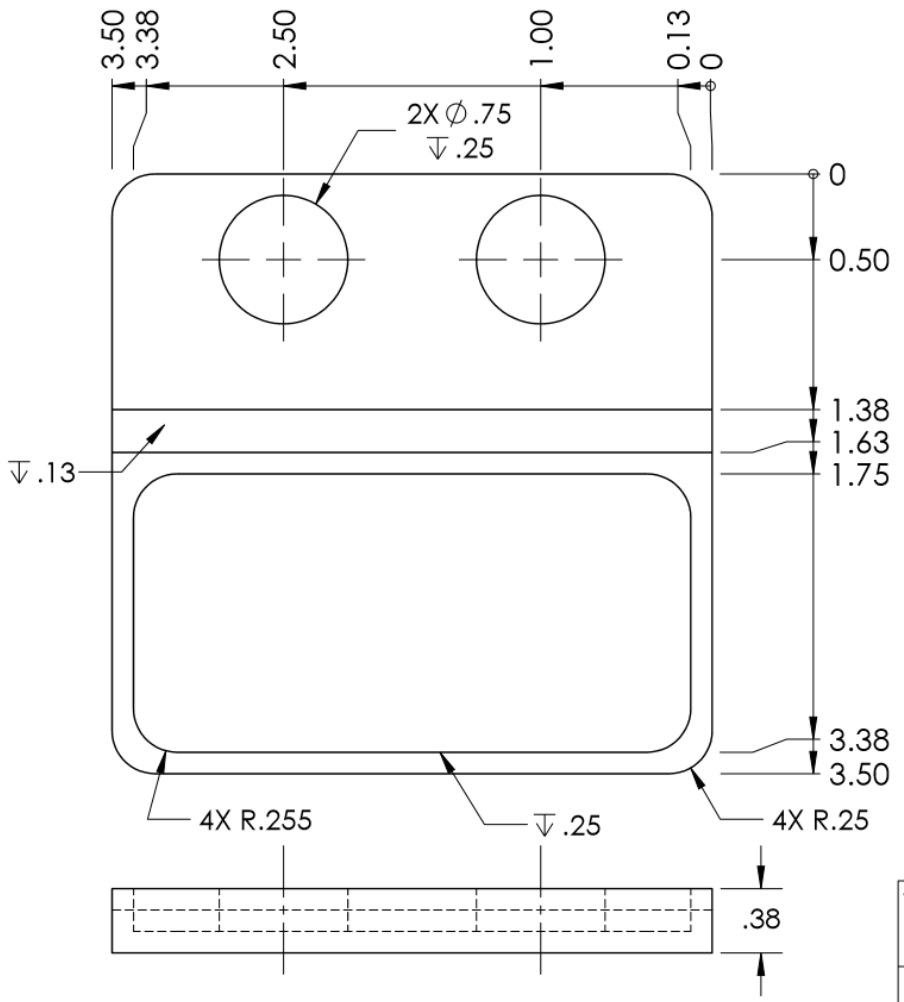
No Tangent Edge Lines

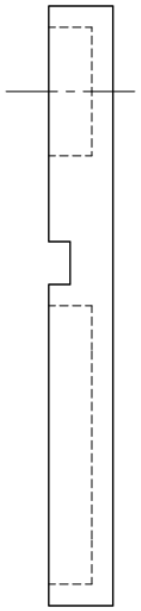
Full color fill

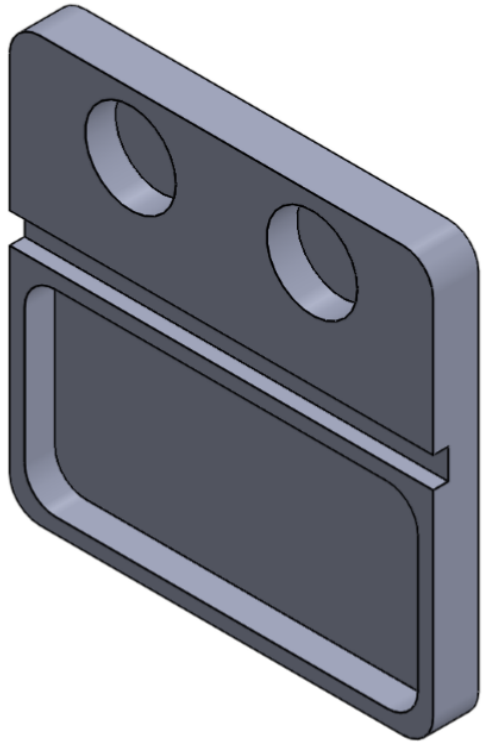
Edge lines visible

Use display style: “Shaded with Edges”









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FRACTIONAL ± 1/32	APPROVED BY: J. Glancey	DATE:
	MATERIAL: ALUMINUM	QUANTITY: 1
ANGULAR ± 0.5 DEG	SCALE: 1:1	DWG NO: 1 OF 1
	BILLING ACCOUNT:	

We need to see the following students now.

- Students that did not take MEEG 202
  - Office hours help for Solidworks
  - Other students also welcome

- Students that did not make the plate and threaded polymer block in MEEG 202
  - Special machine shop session