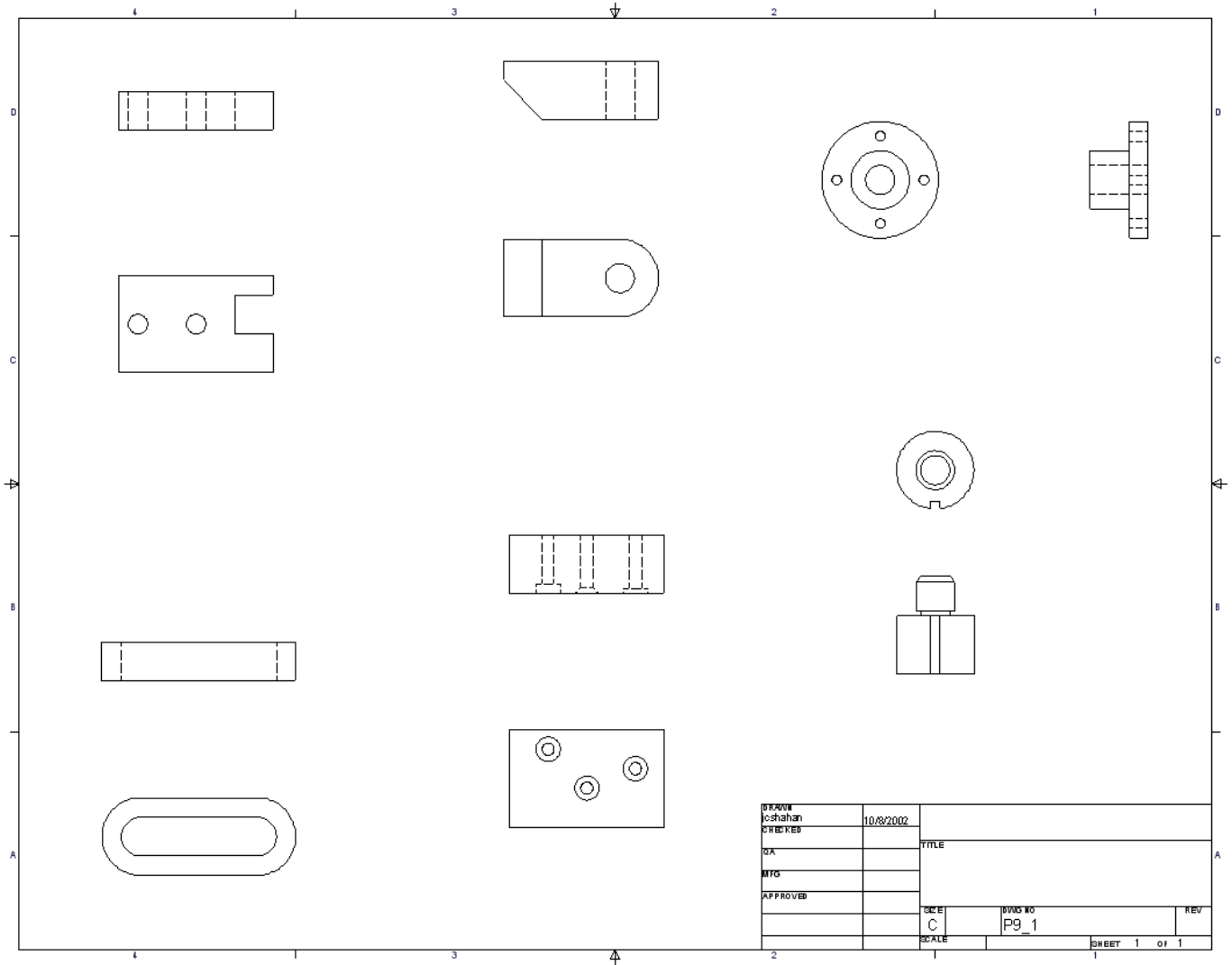# Technical Graphics:

- CAD application – Inventor
  - Views
  - Lines
  - Dimensions(Location, Size, Style)

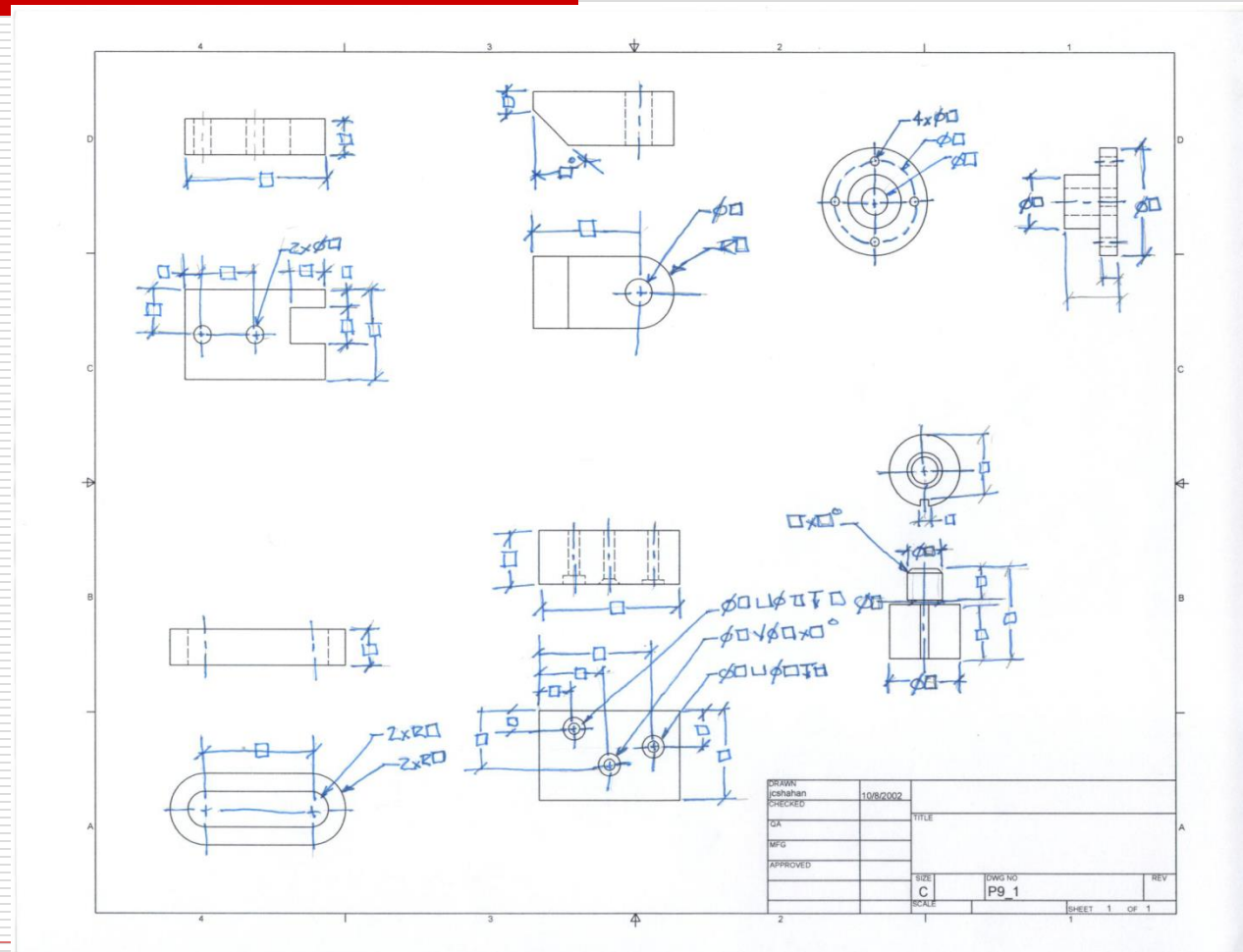# Assignment: Part I

☐ Open the .idw

■ In S:*{Your Class}*\Class Files\P9_1.idw

☐ Add Centerlines

☐ Add "Standard" Dimensions

Given

Standard Dimensioning - Inventor

Sketched Solution

Standard Dimensioning - Inventor
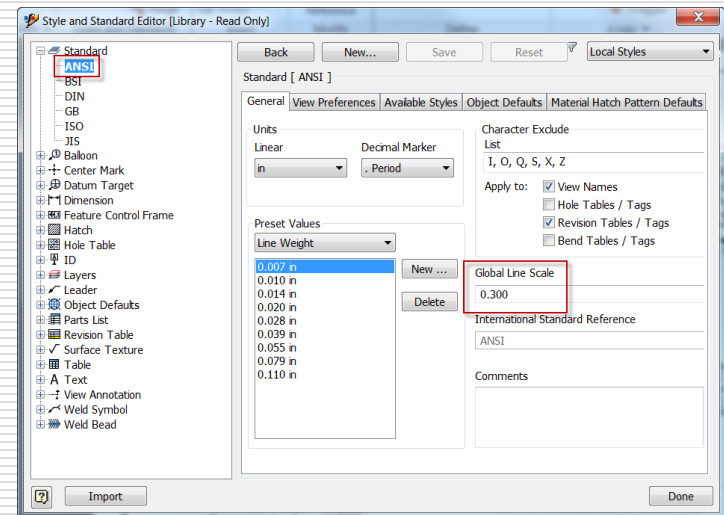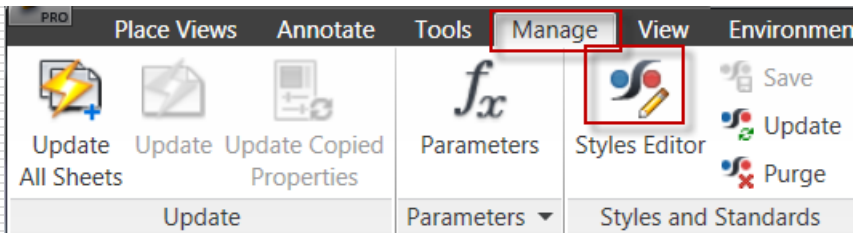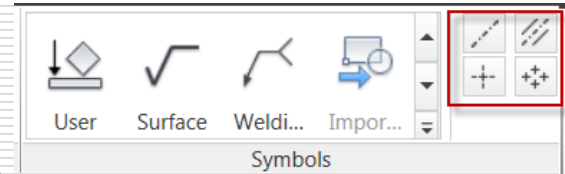
P9.1-1: Centers

☐ Center:
- ■ Line, Bisector, Mark, pattern
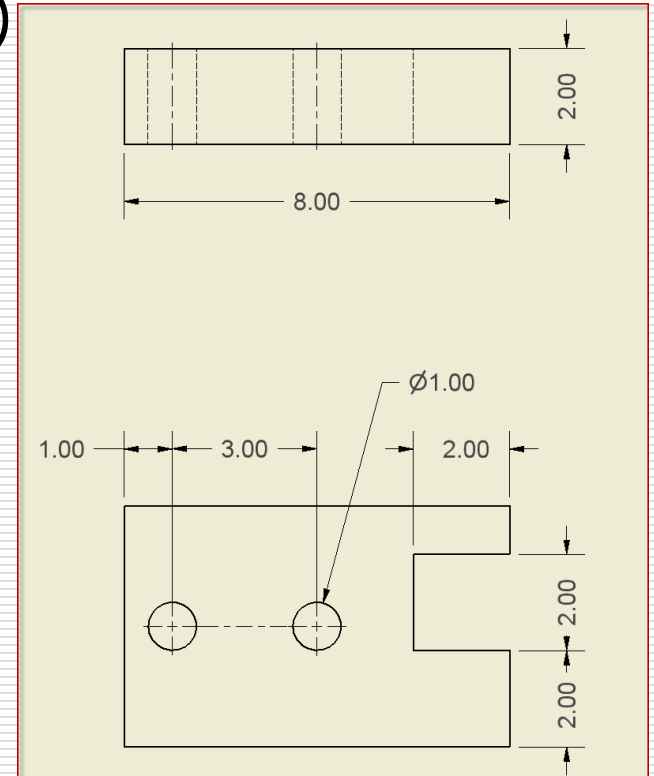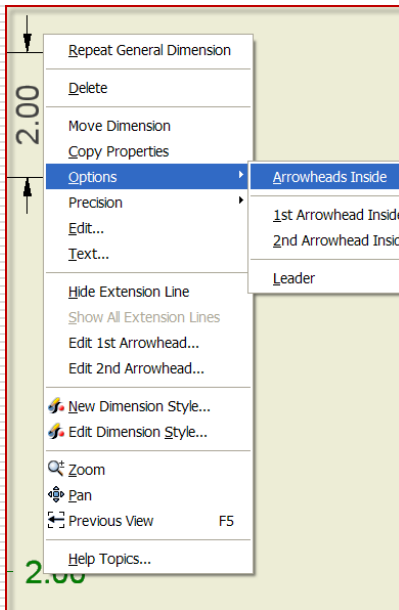
☐ Format
- ■ Style and Standard Editor
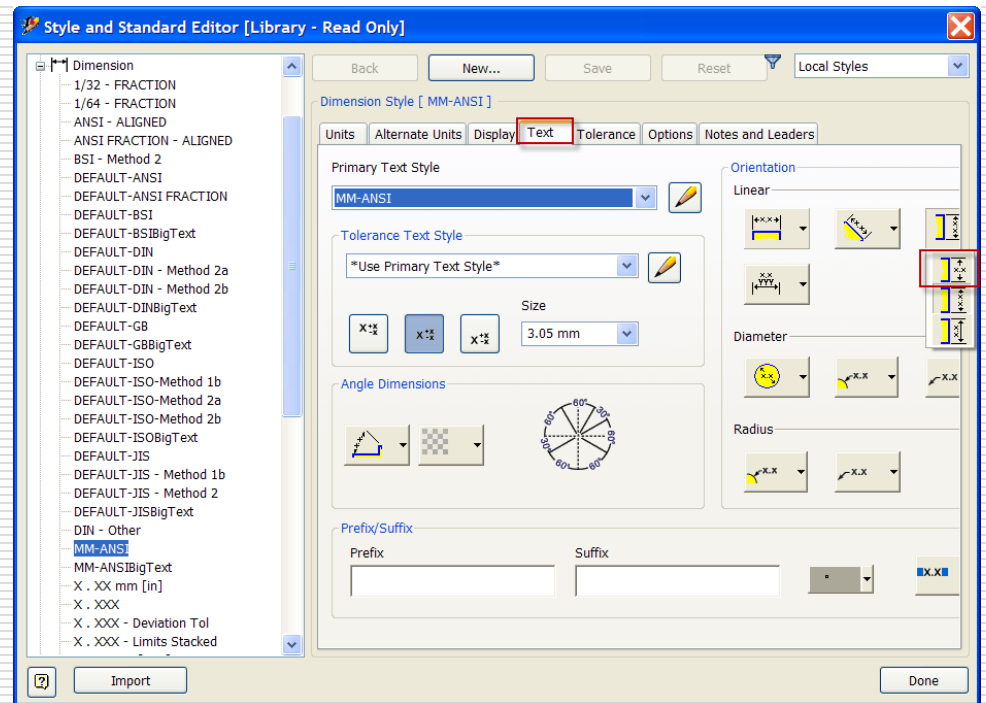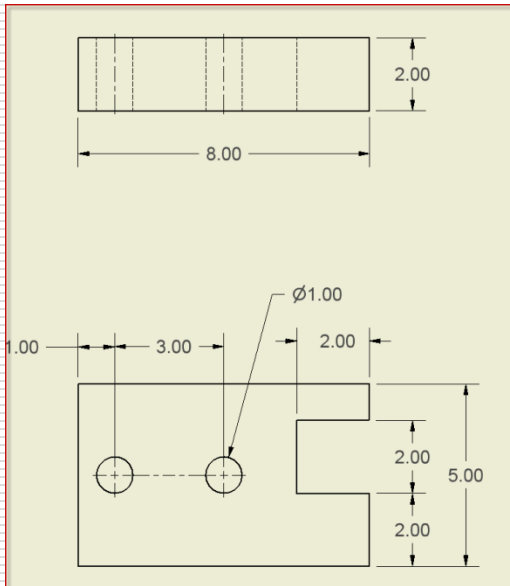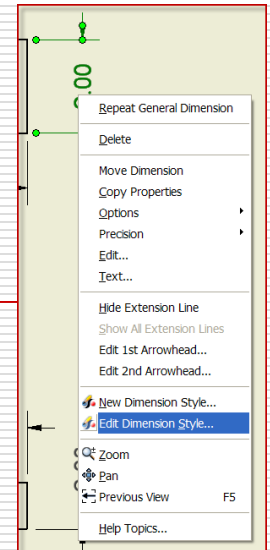 - ☐ ANSI
  - ☐ Global Line Scale:.3

P9.1-1: Dimension

☐ General Dimension

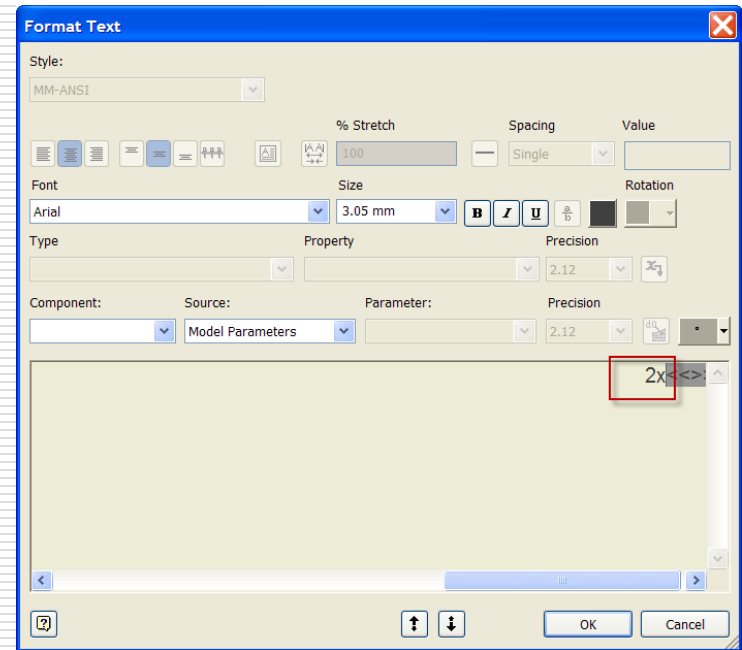■ Options (Select Dimension)
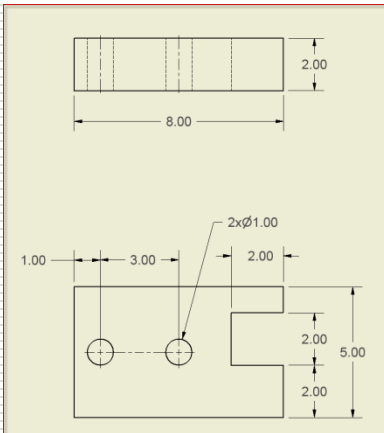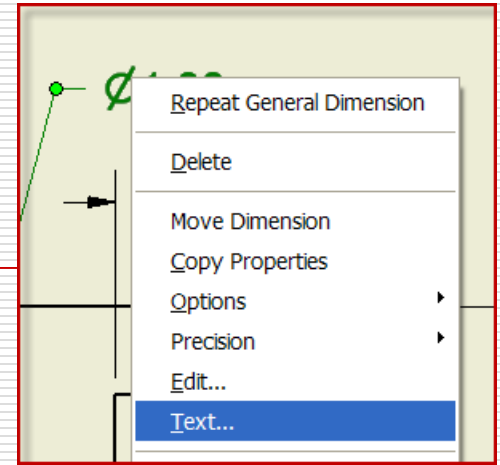
☐ Arrowheads Inside

P9.1-1: Dimension Style

☐ Edit Dimension Style
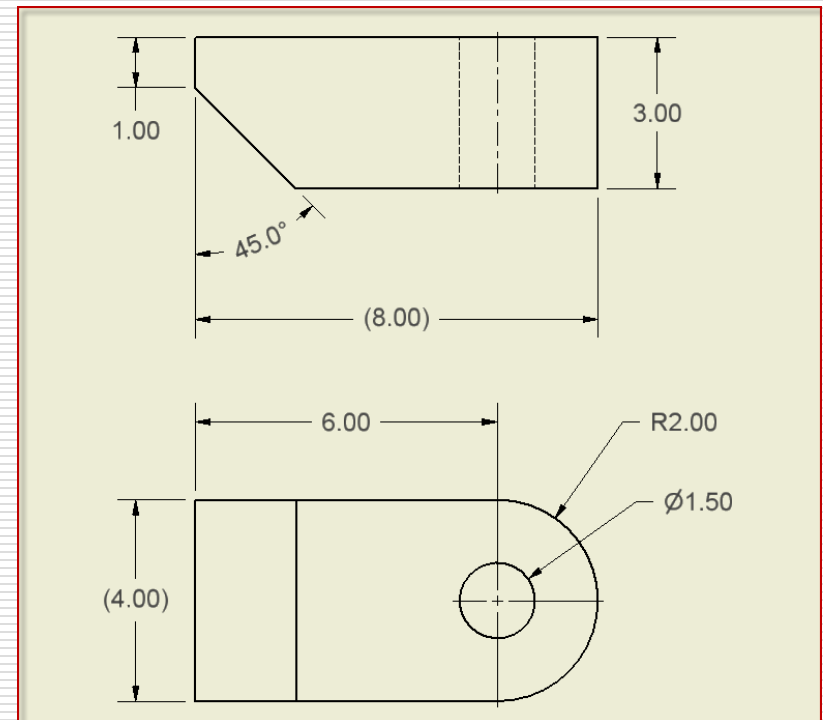- ■ Pre-select dimension
- ■ Text

P9.1-1: Dimension Text

☐ Select Dimension

  ■ Right Mouse button
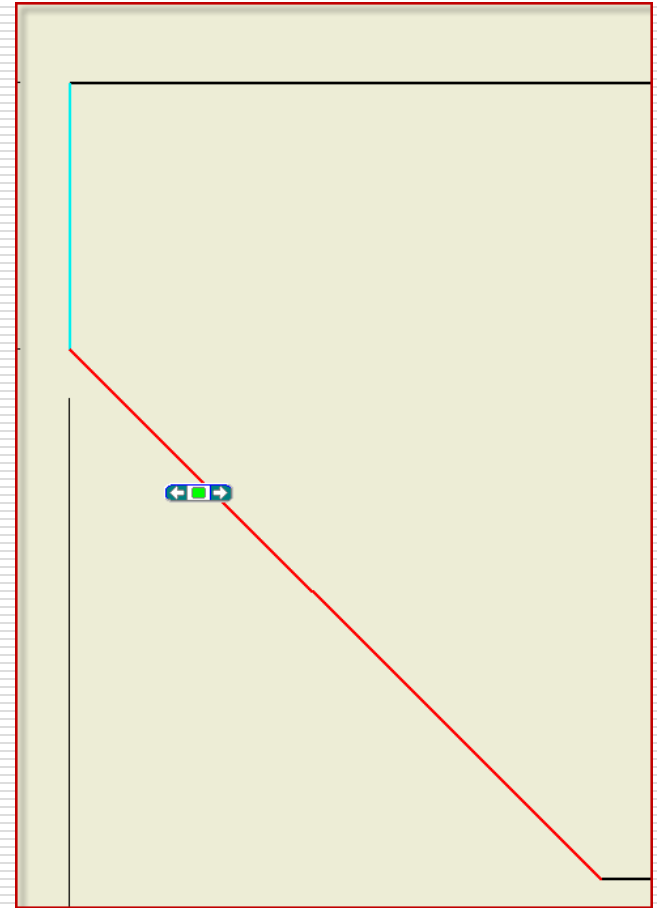
  ■ Text

  ■ Add / Enter: 2x

P9.1-2:

- ☐ Center Mark
- ☐ Centerline Bisector
- ☐ General Dimension
  - ☐ Angle
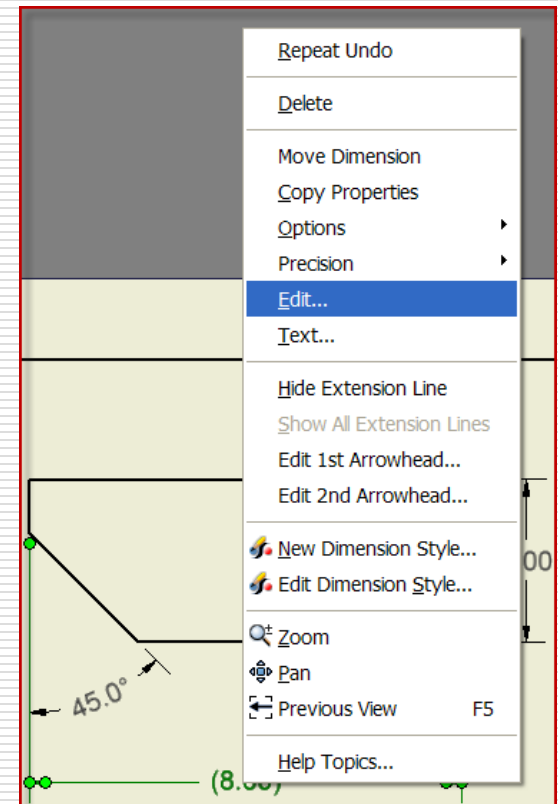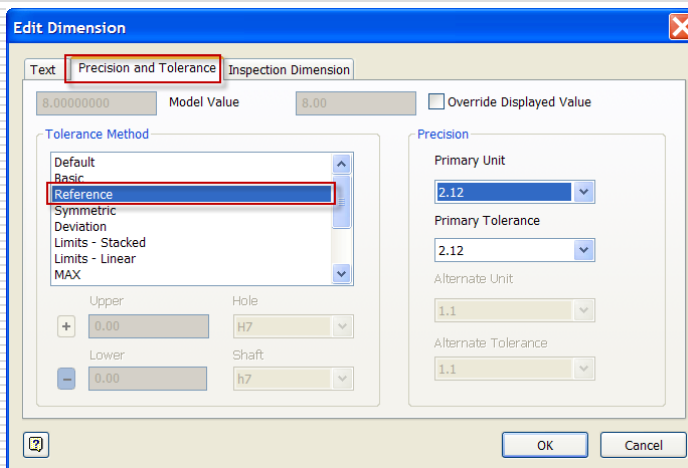 - ☐ Reference Dimension

Standard Dimensioning - Inventor

P9.1-2: Dimension - Angle
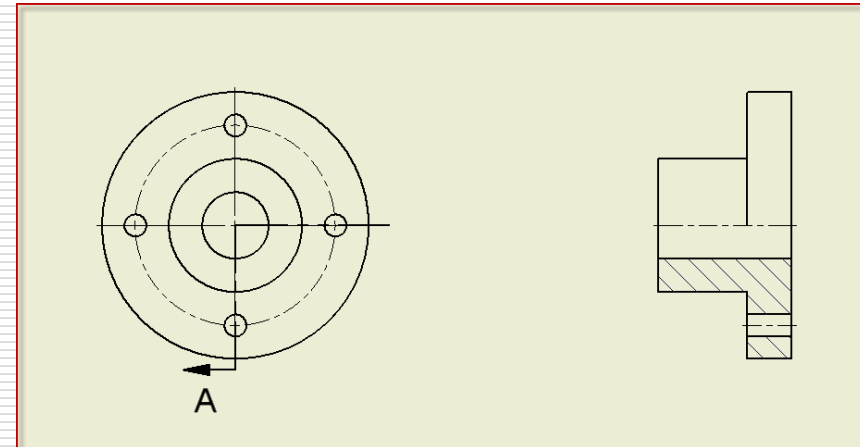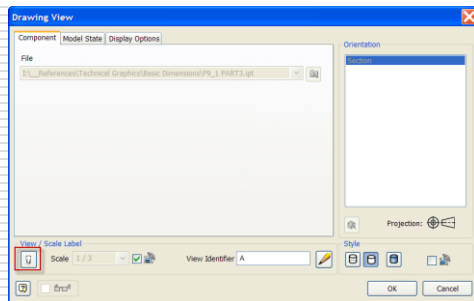
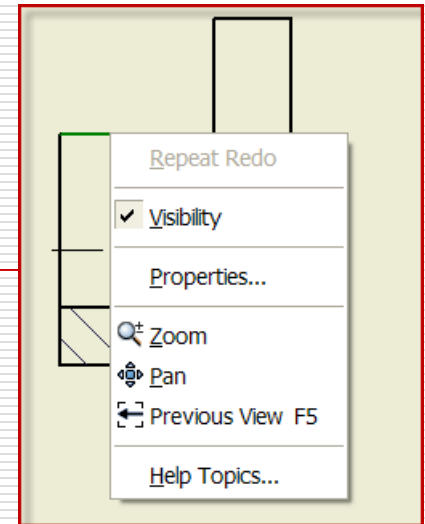□ Select Lines
- ■ Not points

P9.1-2: Reference Dimension

☐ Select Dimension(s)

■ Right Mouse Button
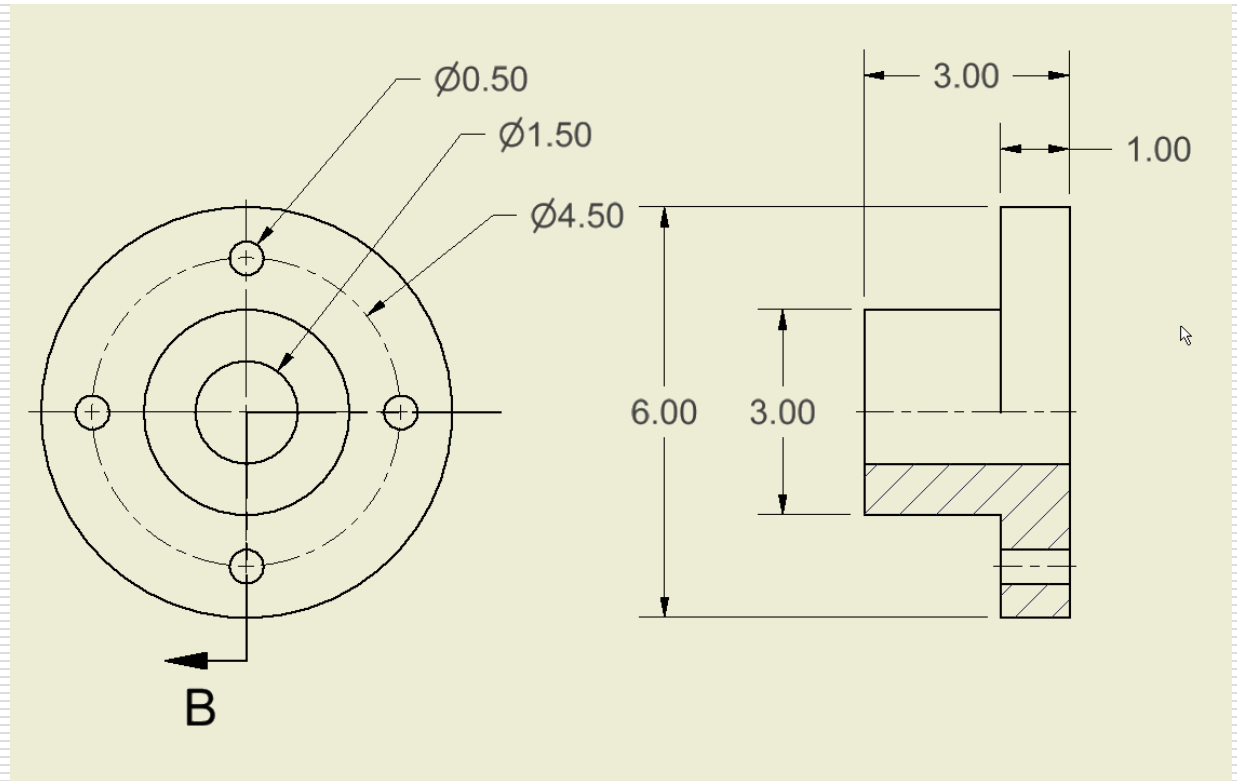
☐ Edit

■ Precision and Tolerance

■ Reference

P9.1-3: Section View

☐ Cutting Plane (Front view)

☐ Line Visibility

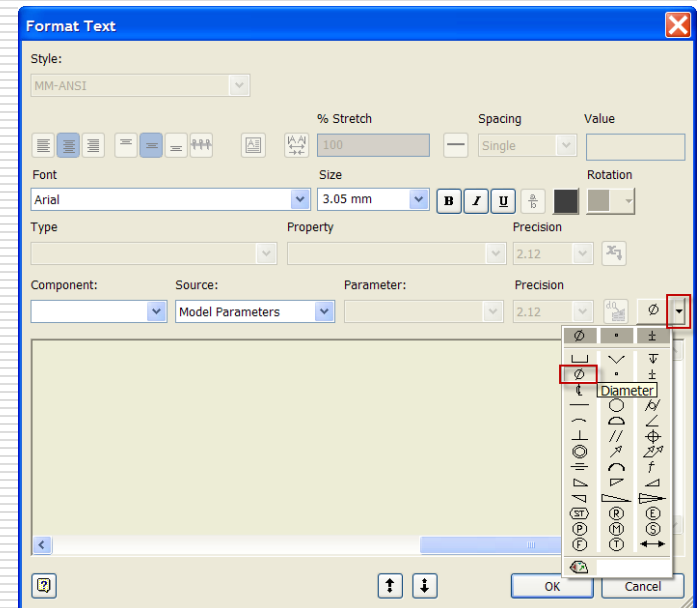◼ Select Line (right click)

◼ Un-check visibility
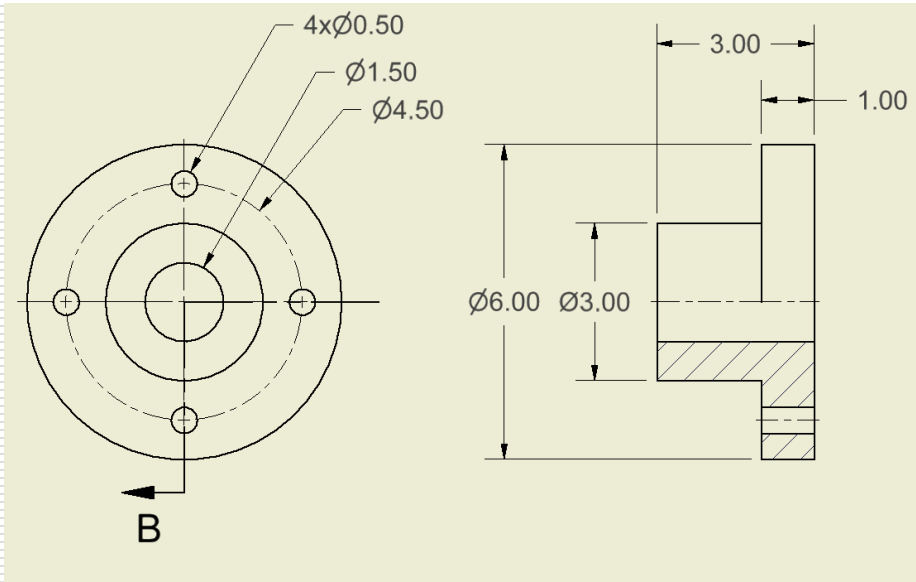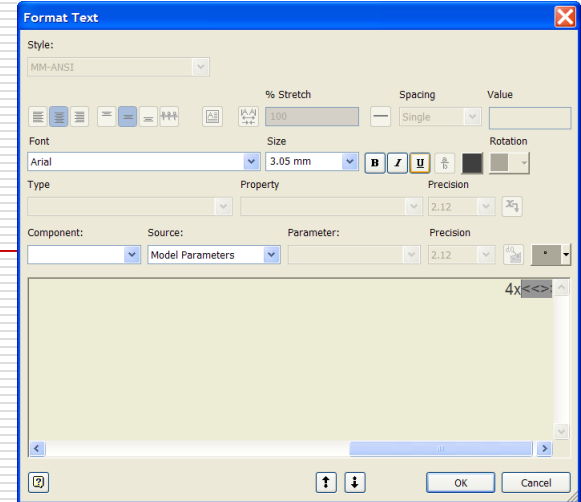
☐ Edit the section View

◼ View / Scale Label
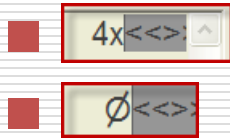
P9.1-3: Dimensions
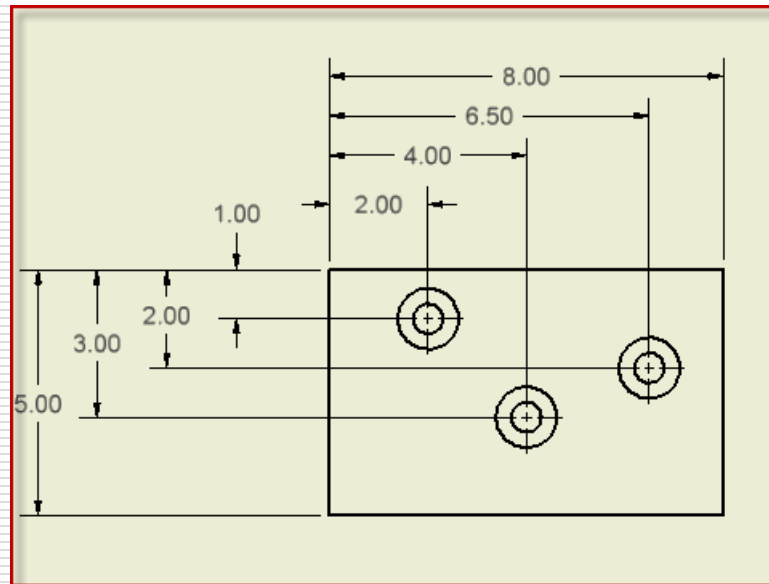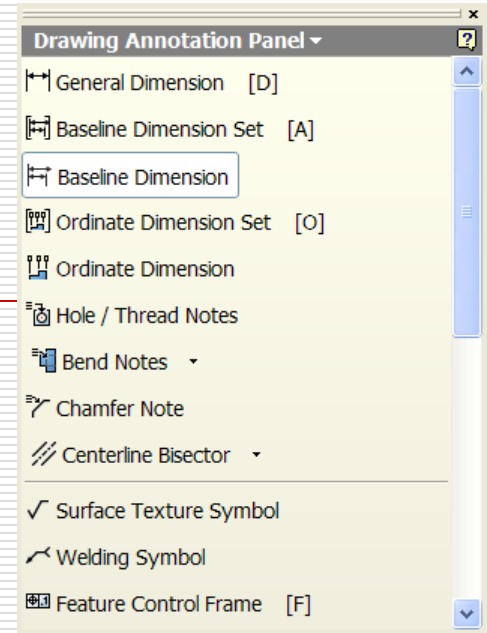
☐ General Dimension

P9.1-3: Text

□ General Dimension

■ `4x<<>>`

■ `Ø<<>>`

4x⌀0.50
⌀1.50
⌀4.50
⌀6.00 ⌀3.00

3.00
1.00

B

P9.1-4:

□ Similar to previous

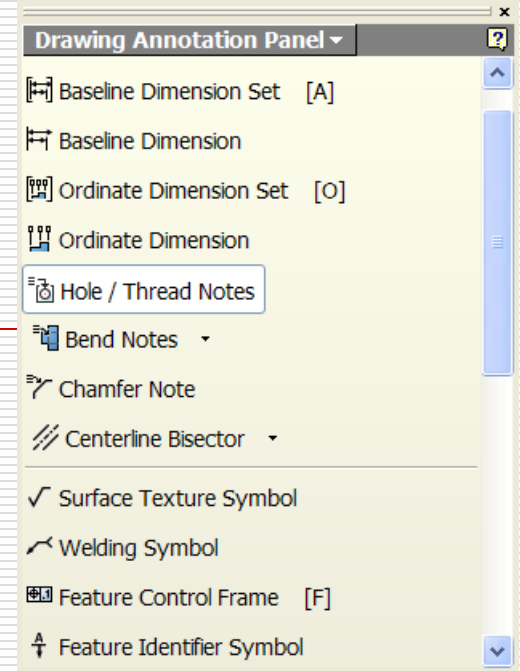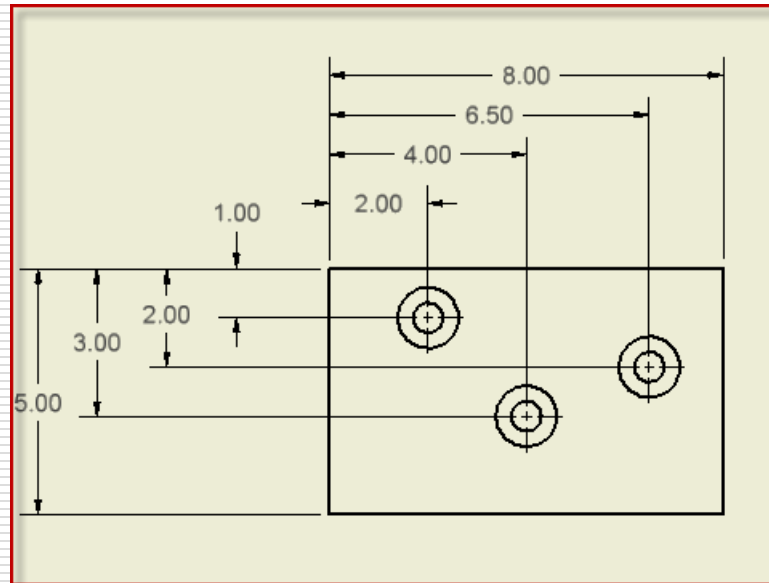Standard Dimensioning - Inventor
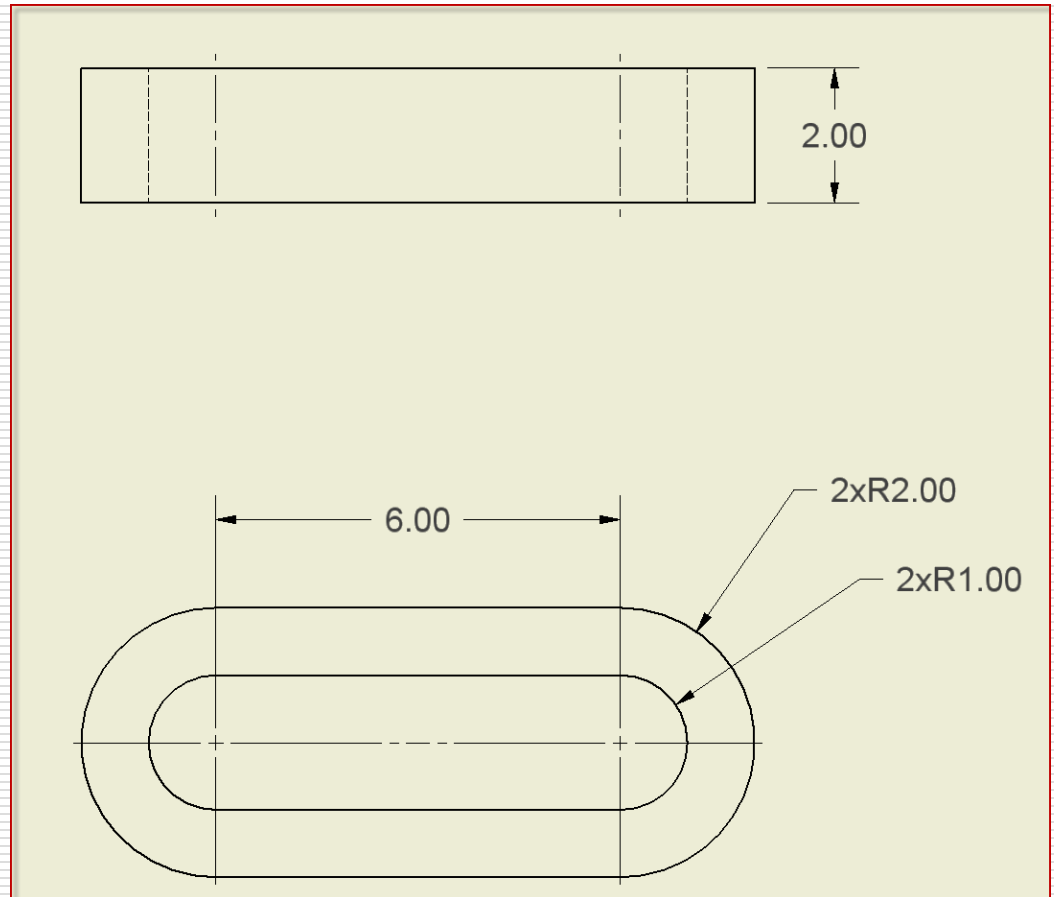
P9.1-5: Baseline Dims

☐ Select

- all vertical references
- Continue
- Place the Dimension set

P9.1-5: Hole Notes

- ☐ Requires Hole Feature in the part model

Drawing Annotation Panel ▾

- ⊞ Baseline Dimension Set   [A]
- ⊢ Baseline Dimension
- ⊞ Ordinate Dimension Set   [O]
- ⊔ Ordinate Dimension
- 🔲 Hole / Thread Notes
- ⊟ Bend Notes   ▾
- 〉 Chamfer Note
- ⫽ Centerline Bisector   ▾
- √ Surface Texture Symbol
- ⌒ Welding Symbol
- ⊞ Feature Control Frame   [F]
- ⊹ Feature Identifier Symbol
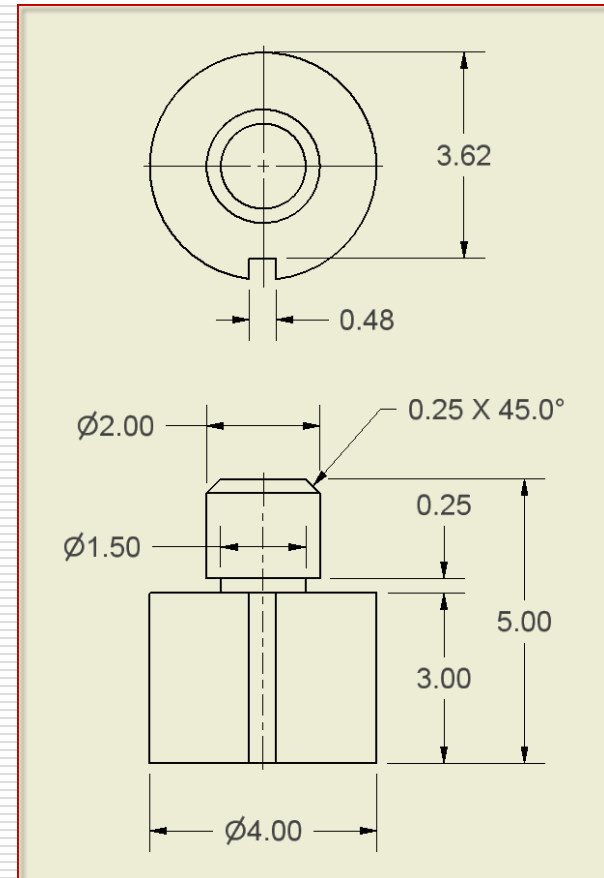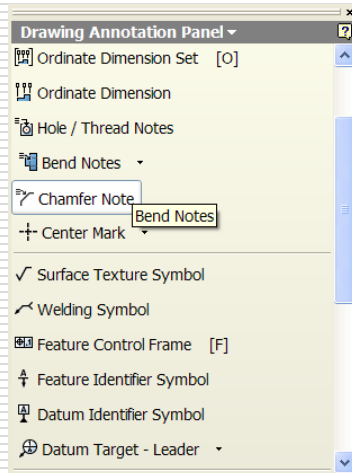
P9.1-5: Complete

☐ Requires Hole Fe͟ ͟ ͟
   model
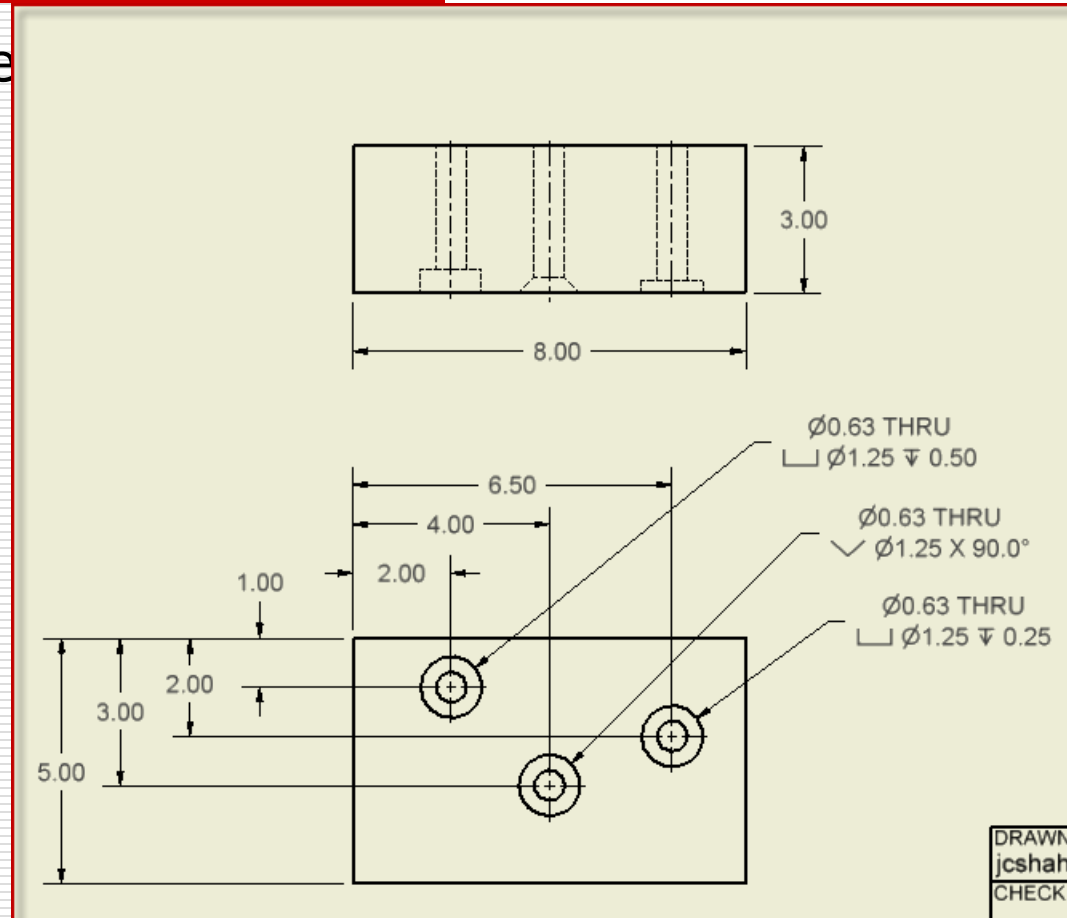
P9.1-6: Complete

- ☐ Includes
  - ■ ANSI standard Dimensions
    - ☐ Keyway
    - ☐ Chamfer
    - ☐ Cylindrical
  - ■ Chamfer Note

Assignment: Part II

- Open the .idw:
  - AutomaticStop Plus.idw
- Add "Standard" Dimensions

AutomaticStop Plus: Complete
(Find the missing dimension)