

D

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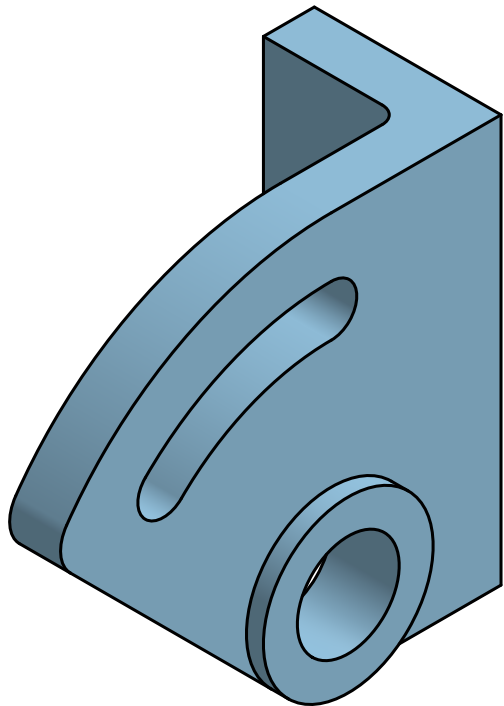
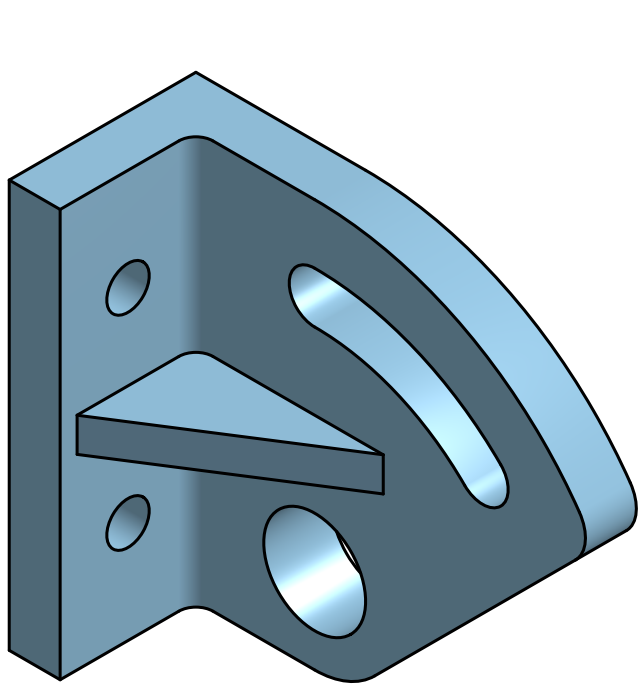
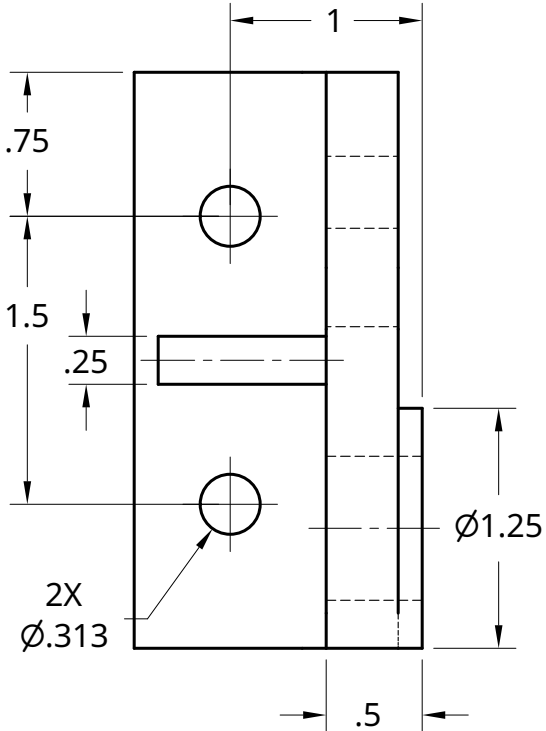
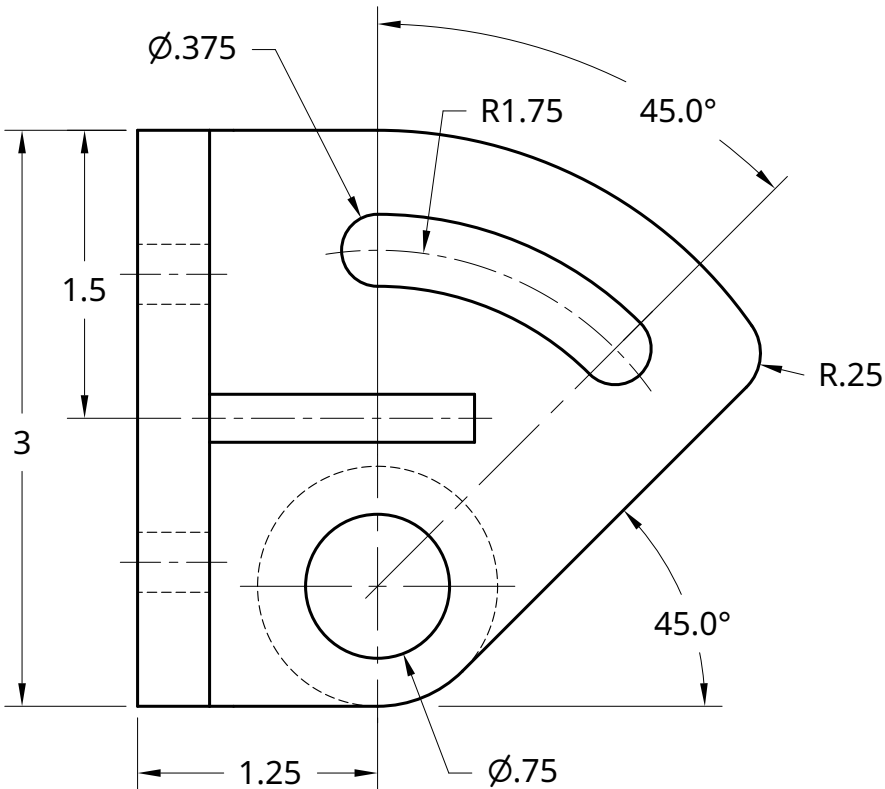
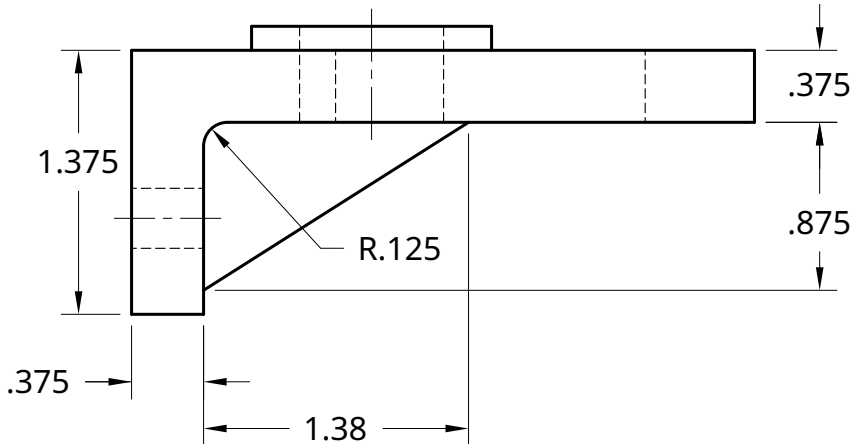
D

C

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Modeling Notes
Match dimensional design intent while modeling
Use the rib tool for the 0.25 thick triangular rib
Use slot tool for curved slot



UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES .XX = ±.0- .XXX = ±.00- .XXXX = ±.000- SURFACE FINISH ✓ DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION		NAME	DATE	Ferris State University		
		DRAWN	BRIAN BRADY	07/16/2019	TITLE	
		CHECKED			M3 - MODELING ASSIGNMENT	
		APPROVED			TENSIONER BRACKET	
MATERIAL		VOLUME		SIZE	DWG NO.	REV.
STEEL 1020		3.767 in³		B	M3-1-2019	
SCALE		WEIGHT		SHEET		
1:1		1.071 lb		1 of 1		

4

3

2

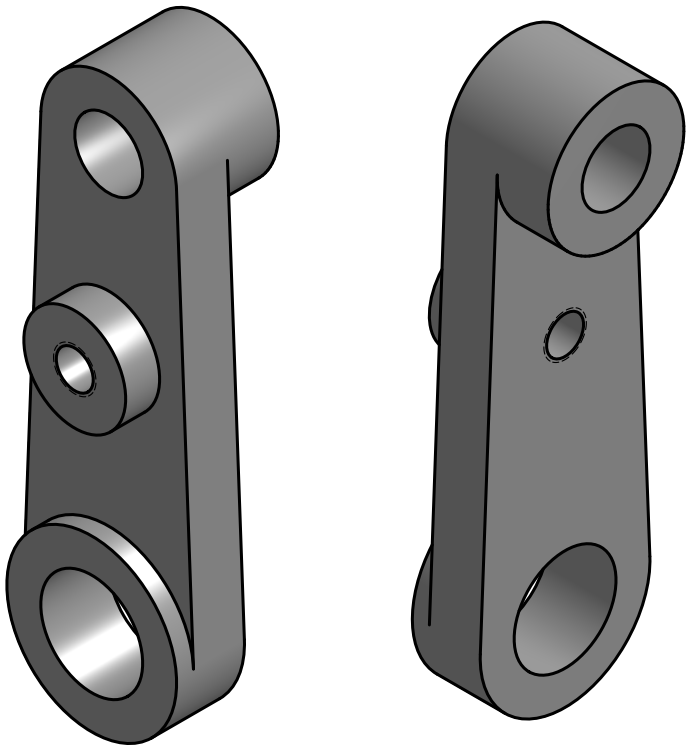
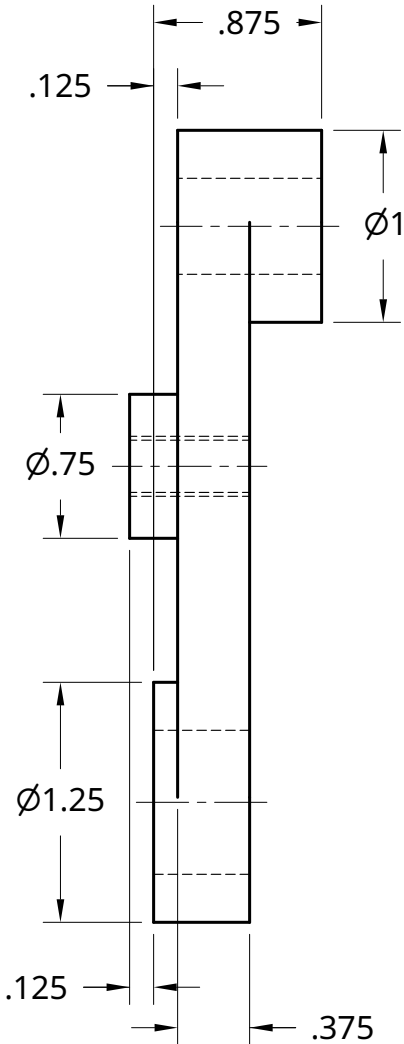
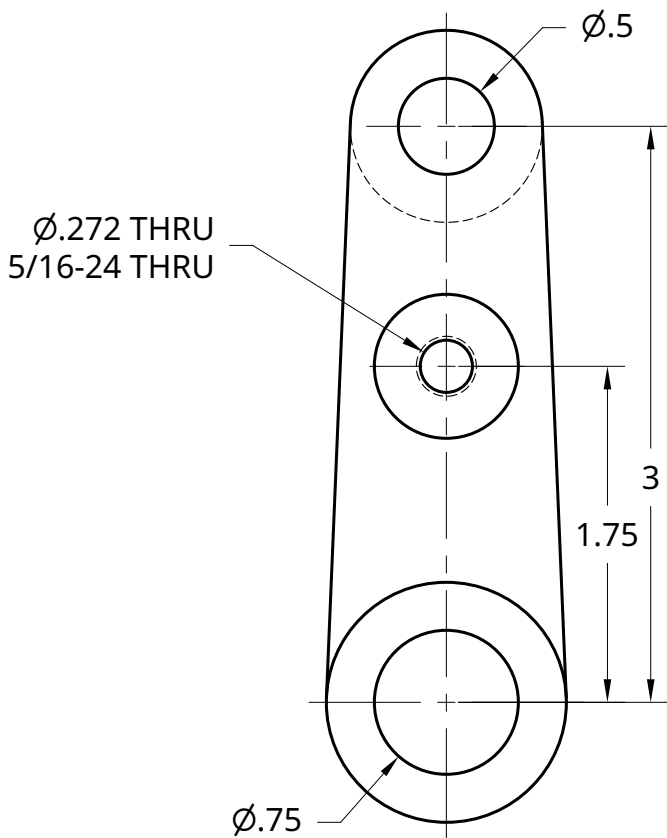
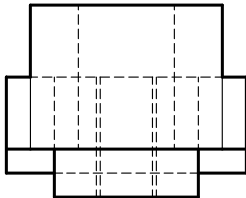
1

Modeling Notes

Match dimensional design intent while modeling

Use hole tool for tapped hole

Note the tangencies



Ferris State University

M3 - MODELING ASSIGNMENT
TENSION ARM

SIZE B DWG NO. M3-2-2019 REV.

SCALE 1:1 WEIGHT 0.511 lb SHEET 1 of 1

4

3

2

1

Modeling Notes

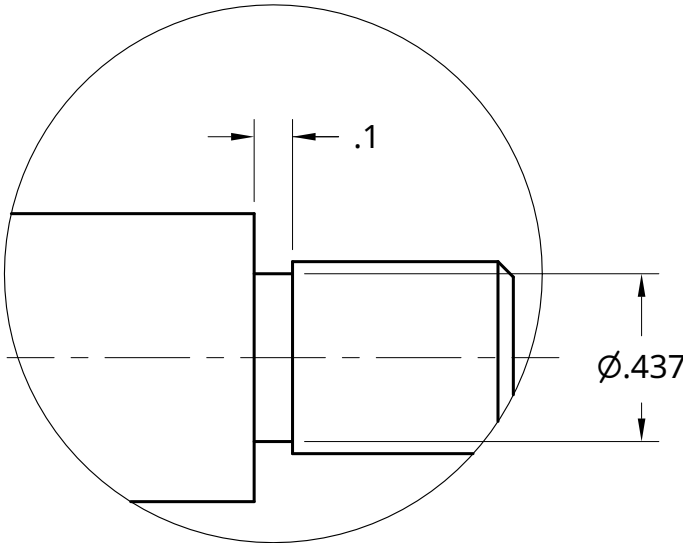
Match dimensional design intent while modeling

Use extrude or revolve tool to make primary shape

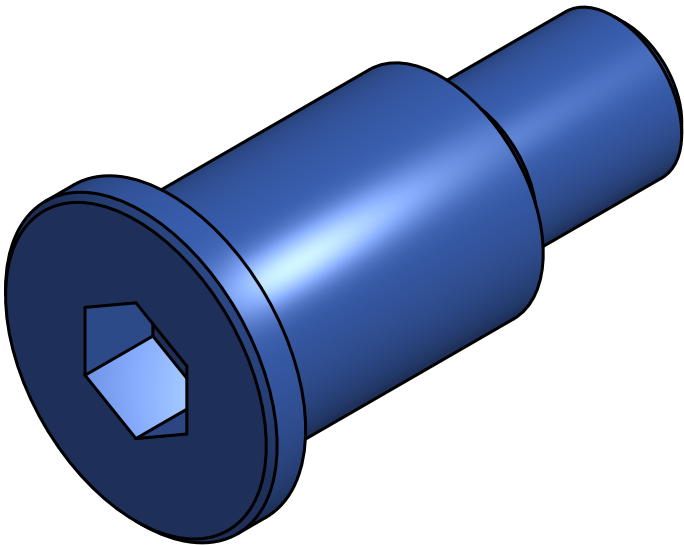
Create undercuts/grooves with separate revolved features

Do not add thread, just create at nominal size based on thread callout

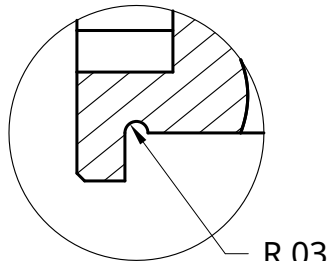
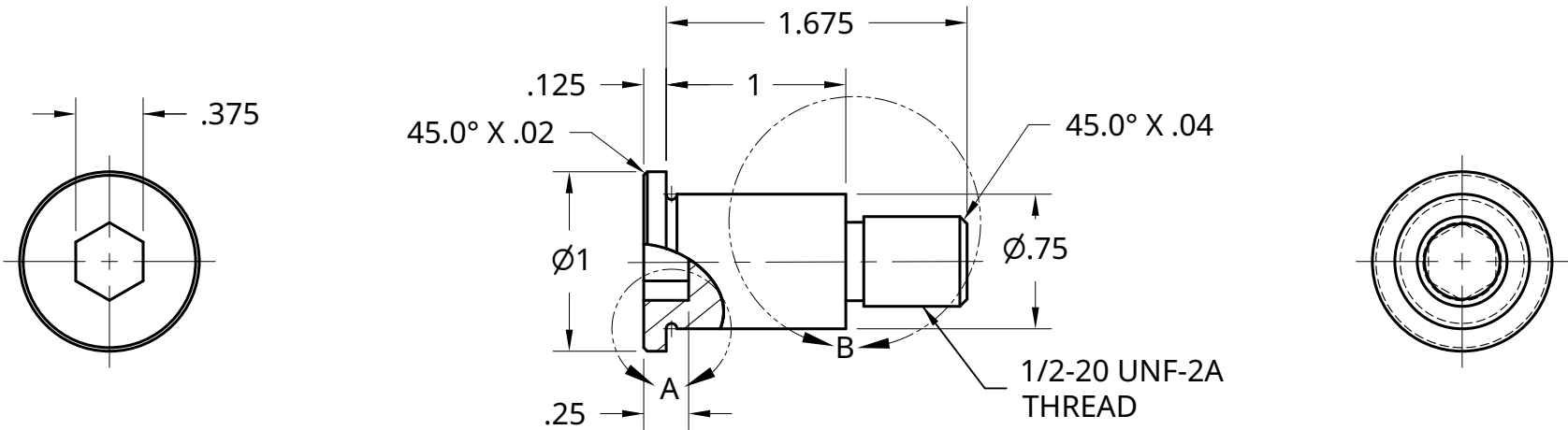
Use diameter dimensions in all sketches where diameter dimensions are used in the drawing




DETAIL B
THREAD GROOVE
SCALE 2:1



SCALE 2:1



DETAIL A
HEAD UNDERCUT
SCALE 2:1

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES .XX = ±.0- .XXX = ±.00- .XXXX = ±.000- SURFACE FINISH ✓		NAME BRIAN BRADY		DATE 07/16/2019		Ferris State University					
DO NOT SCALE DRAWING		DRAWN		CHECKED		TITLE M3 - MODELING ASSIGNMENT PIVOT SHAFT					
BREAK ALL SHARP EDGES AND REMOVE BURRS		APPROVED									
THIRD ANGLE PROJECTION		MATERIAL		VOLUME		SIZE		DWG NO.		REV.	
		STEEL 8620		0.632 in³		B		M3-3-2019			
						SCALE		WEIGHT		SHEET	
						1:1		0.179 lb		1 of 1	

4

3

2

1

Modeling Notes

Match dimensional design intent while modeling

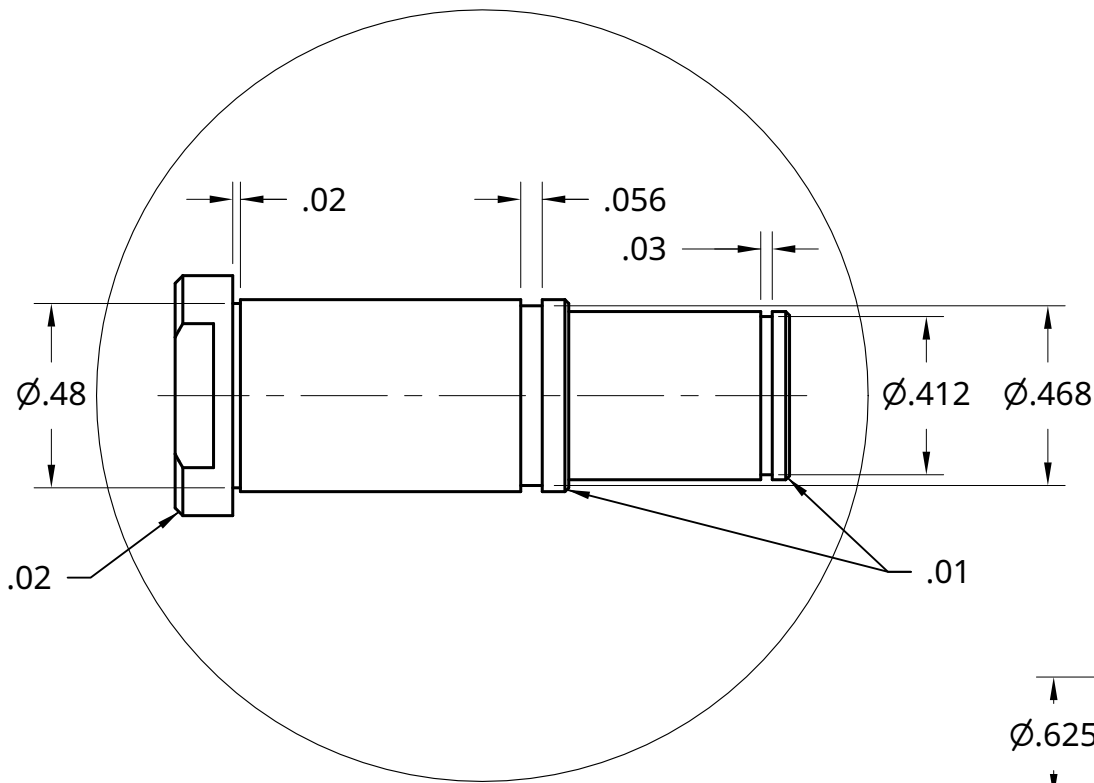
Use the revolve tool to create the primary shape

Use separate revolved features to create the undercuts/grooves

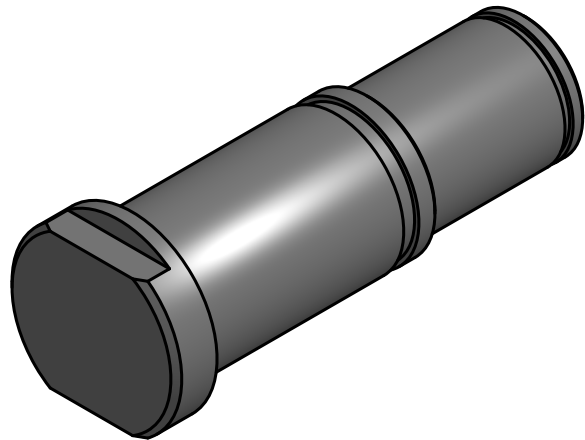
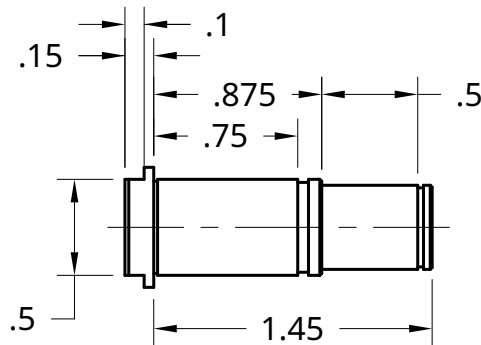
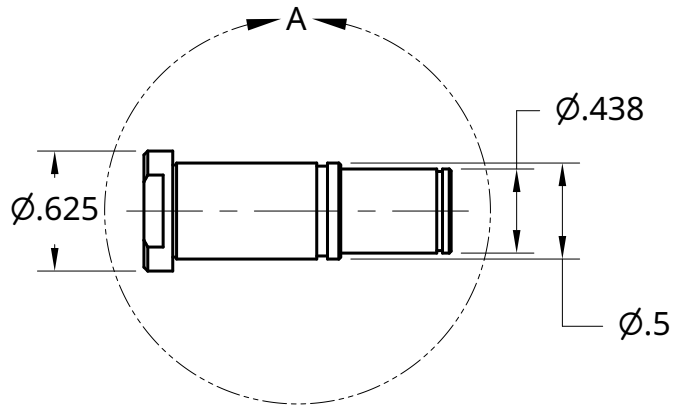
Use the extrude tool to create the flats on the "head" end

Use diameter dimensions in all sketches where diameter dimensions are used in the drawing

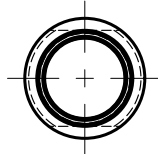
Use the chamfer option that matches the drawing chamfer dimension style



DETAIL A
GROOVES AND CHAMFERS
SCALE 2:1



SCALE 2:1



UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES .XX = ±.0- .XXX = ±.00- .XXXX = ±.000- SURFACE FINISH ✓ DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION	NAME		DATE	Ferris State University M3 - MODELING ASSIGNMENT PULLEY SHAFT		
	DRAWN	BRIAN BRADY	07/17/2019			
	CHECKED					
	APPROVED					
	MATERIAL		VOLUME		SIZE	DWG NO.
	STEEL 8620		0.299 in³		B	M3-4-2019
	SCALE	1:1	WEIGHT	0.085 lb	SHEET	1 of 1

D

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A

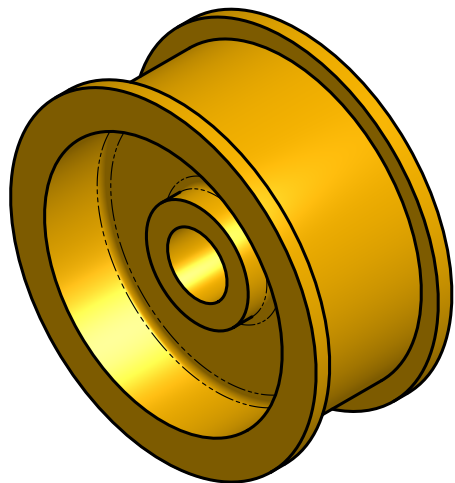
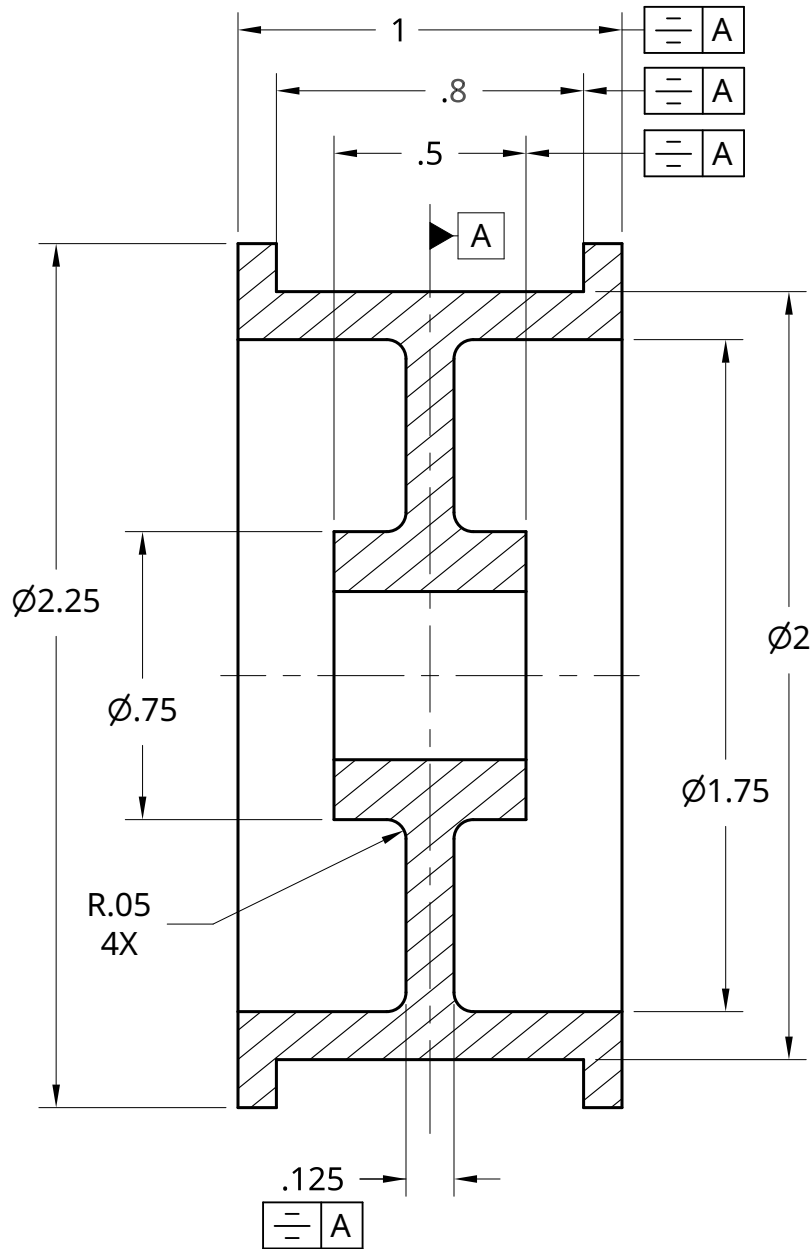
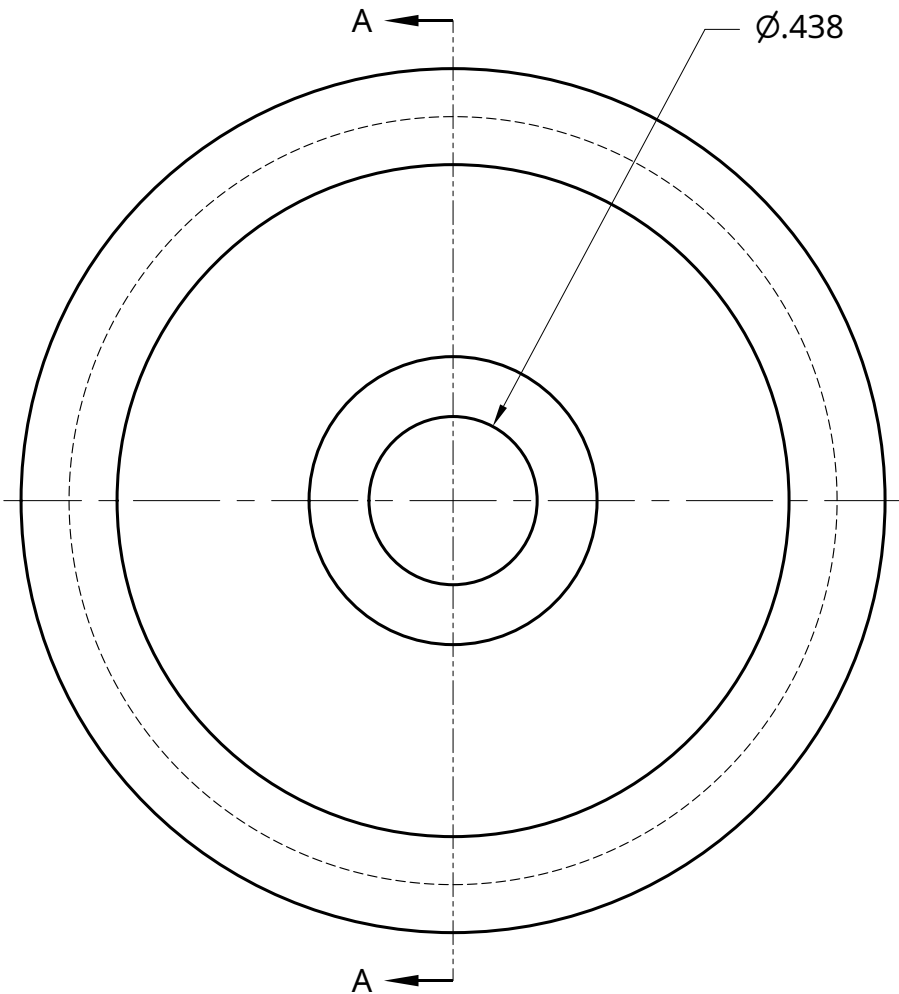
D

C


B

A

Modeling Notes
Match dimensional design intent while modeling
Use the revolve tool to create the primary shape
Add fillets as separate features after the initial revolve is created
Use diameter dimensions in all sketches where diameter dimensions are used in the drawing



SCALE 1:1

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES .XX = ±.0- .XXX = ±.00- .XXXX = ±.000- ANGULAR = ±° FRACTIONAL = ± SURFACE FINISH ✓ DO NOT SCALE DRAWING BREAK ALL SHARP EDGES AND REMOVE BURRS THIRD ANGLE PROJECTION 		NAME		DATE		Ferris State University					
		DRAWN		BRIAN BRADY						07/17/2019	
		CHECKED						TITLE M3 - MODELING ASSIGNMENT IDLER PULLEY			
		APPROVED									
SIZE		B		DWG NO.		M3-5-2019			REV.		
SCALE		2:1		WEIGHT		0.132 lb			SHEET 1 of 1		
MATERIAL		ALUMINUM - 7075		VOLUME		1.303 in³					