

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	Blade		1
2	Rotational_Base		1
3	Small_Gear		1
4	Plastic_Base		1
5	90190A069		4
6	Large_Gear		1
7	Crank		1
8	Crank_Bar		1
9	Minion_Shell_Front_Shell		1
10	Minion_Shell_Back_Shell		1
11	Minion_Shell_Compart ment		1

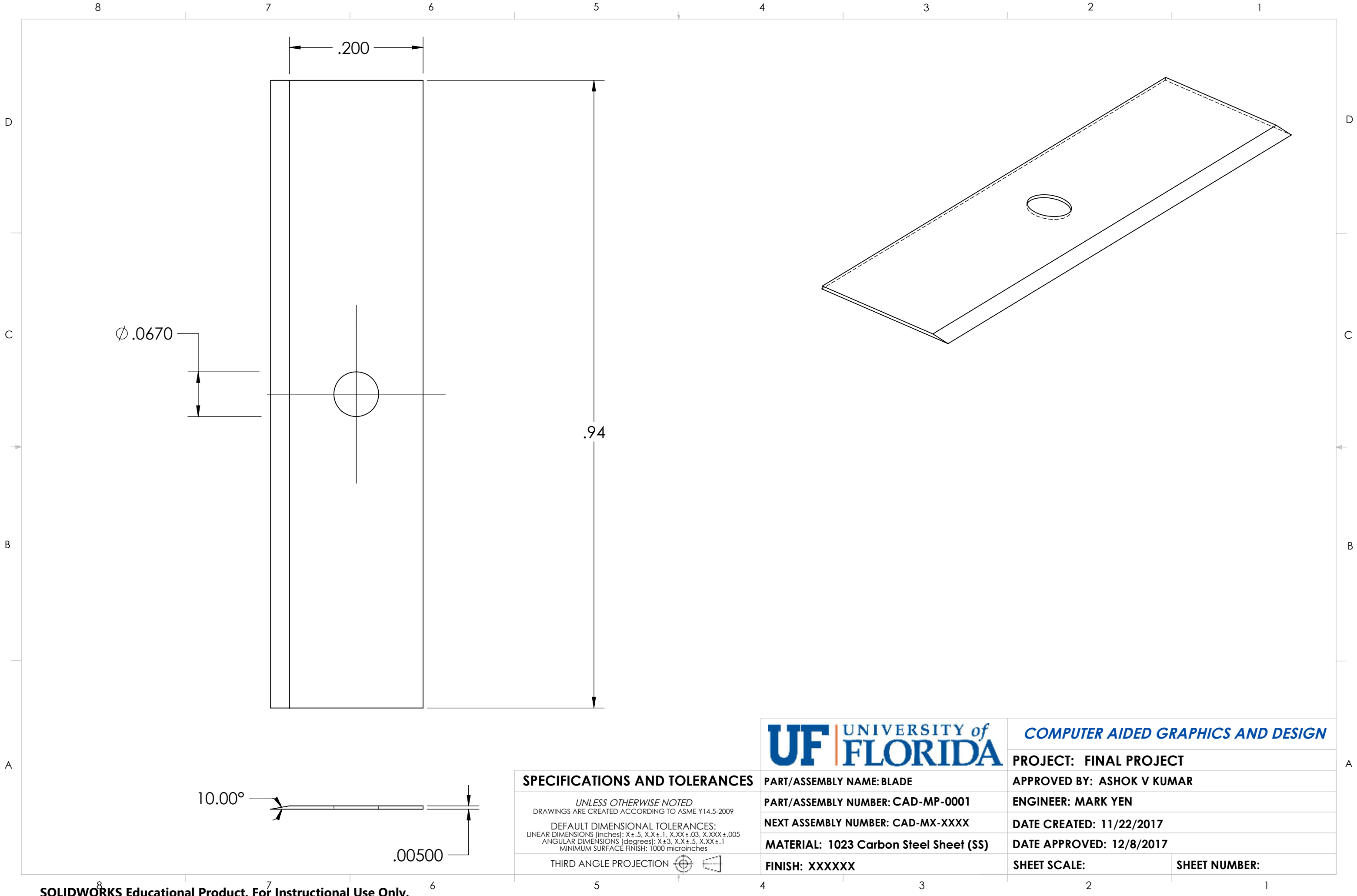
**SPECIFICATIONS AND TOLERANCES**

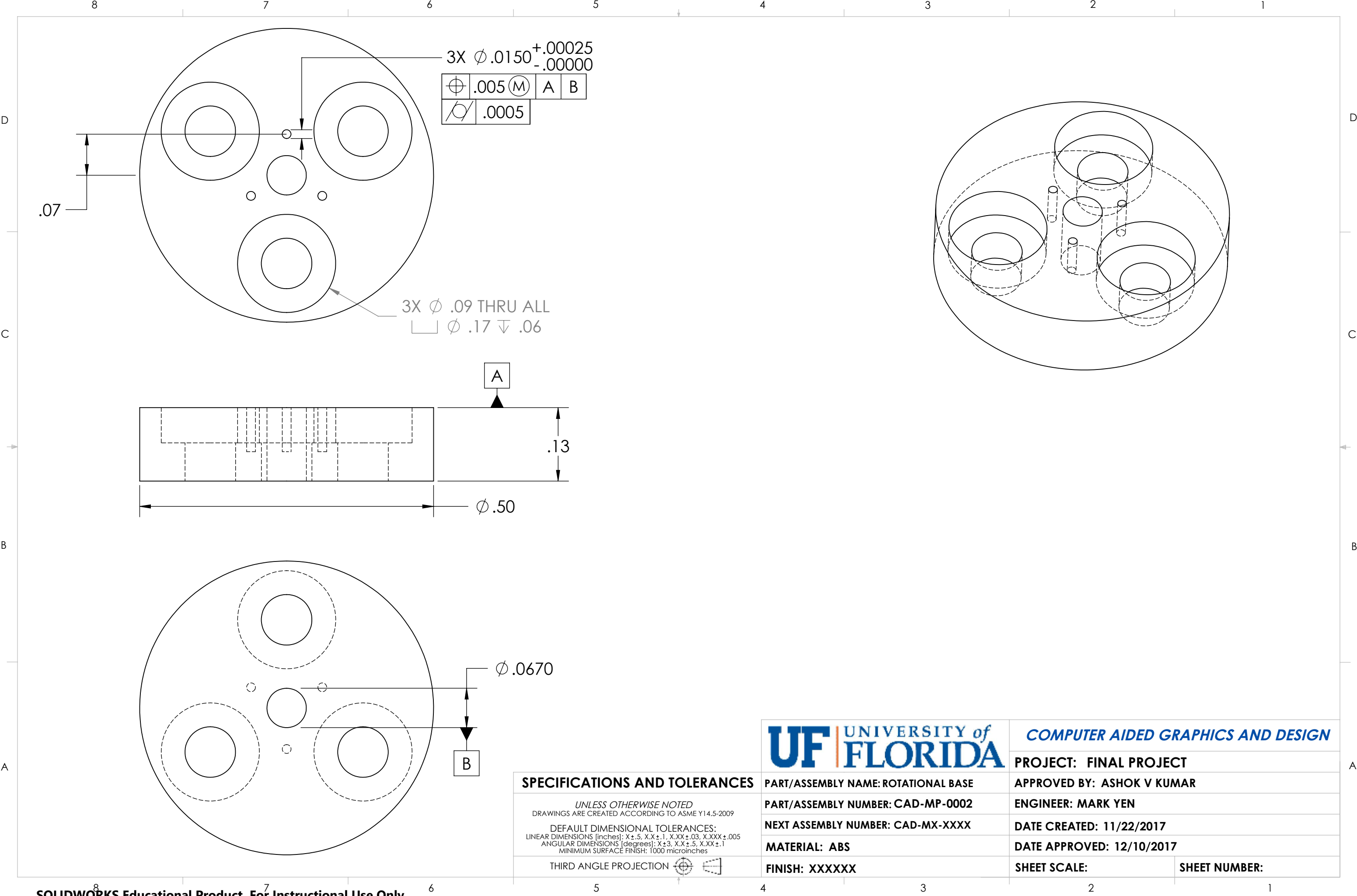
UNLESS OTHERWISE NOTED  
DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009

DEFAULT DIMENSIONAL TOLERANCES:  
LINEAR DIMENSIONS [inches]: X±.5, X.X±.1, X.XX±.03, X.XXX±.005  
ANGULAR DIMENSIONS [degrees]: X±3, X.X±.5, X.XX±.1  
MINIMUM SURFACE FINISH: 1000 microinches

THIRD ANGLE PROJECTION

<b>UF</b> UNIVERSITY of FLORIDA		COMPUTER AIDED GRAPHICS AND DESIGN	
PART/ASSEMBLY NAME: COMPLETE SHARPENER ASSEMBLY		PROJECT: FINAL PROJECT	
PART/ASSEMBLY NUMBER: CAD-MX-XXXX		APPROVED BY: ASHOK V. KUMAR	
NEXT ASSEMBLY NUMBER: CAD-MX-XXXX		ENGINEER: MARK YEN	
MATERIAL: N/A		DATE CREATED: 11/22/2017	
FINISH: XXXXXX		DATE APPROVED: 12/10/2017	
		SHEET SCALE:	SHEET NUMBER:





**SPECIFICATIONS AND TOLERANCES**

UNLESS OTHERWISE NOTED  
DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009  
DEFAULT DIMENSIONAL TOLERANCES:  
LINEAR DIMENSIONS [inches]: X+.5, X.X+.1, X.XX+.03, X.XXX+.005  
ANGULAR DIMENSIONS [degrees]: X+3, X.X+.5, X.XX+.1  
MINIMUM SURFACE FINISH: 1000 microinches

THIRD ANGLE PROJECTION



**COMPUTER AIDED GRAPHICS AND DESIGN**

**PROJECT: FINAL PROJECT**

**APPROVED BY: ASHOK V KUMAR**

**ENGINEER: MARK YEN**

**DATE CREATED: 11/22/2017**

**DATE APPROVED: 12/10/2017**

**PART/ASSEMBLY NAME: ROTATIONAL BASE**

**PART/ASSEMBLY NUMBER: CAD-MP-0002**

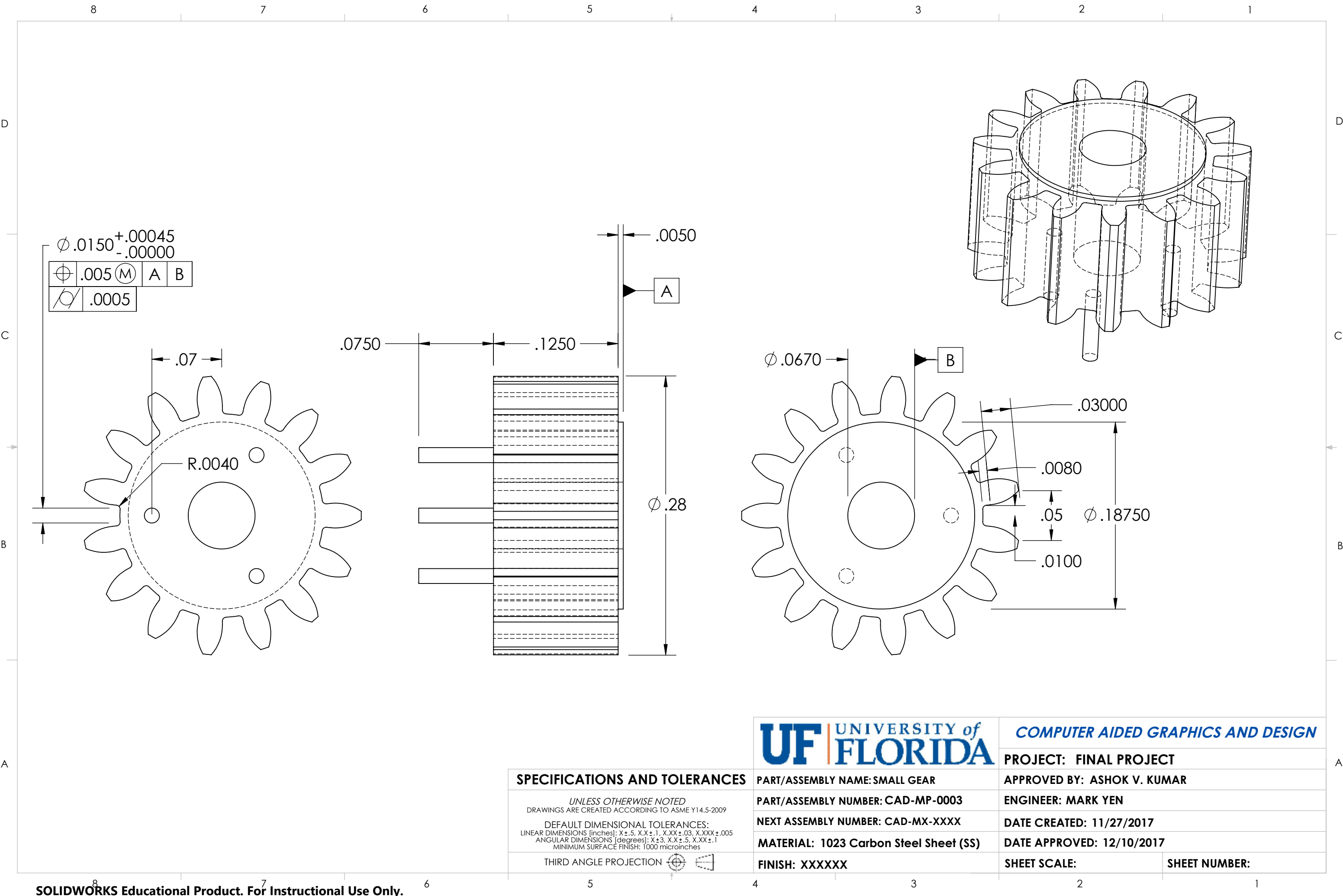
**NEXT ASSEMBLY NUMBER: CAD-MX-XXXX**

**MATERIAL: ABS**

**FINISH: XXXXXX**

**SHEET SCALE:**

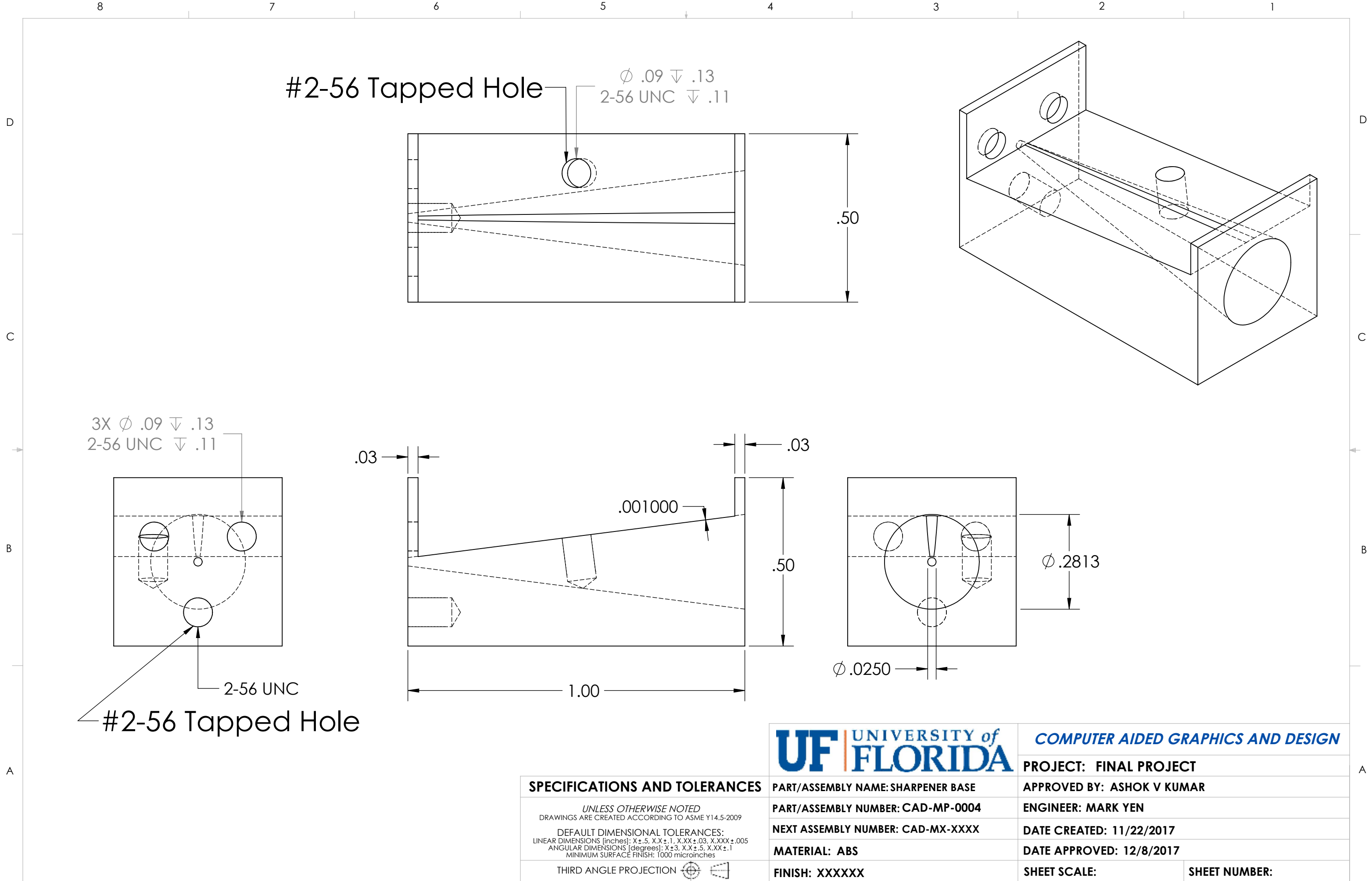
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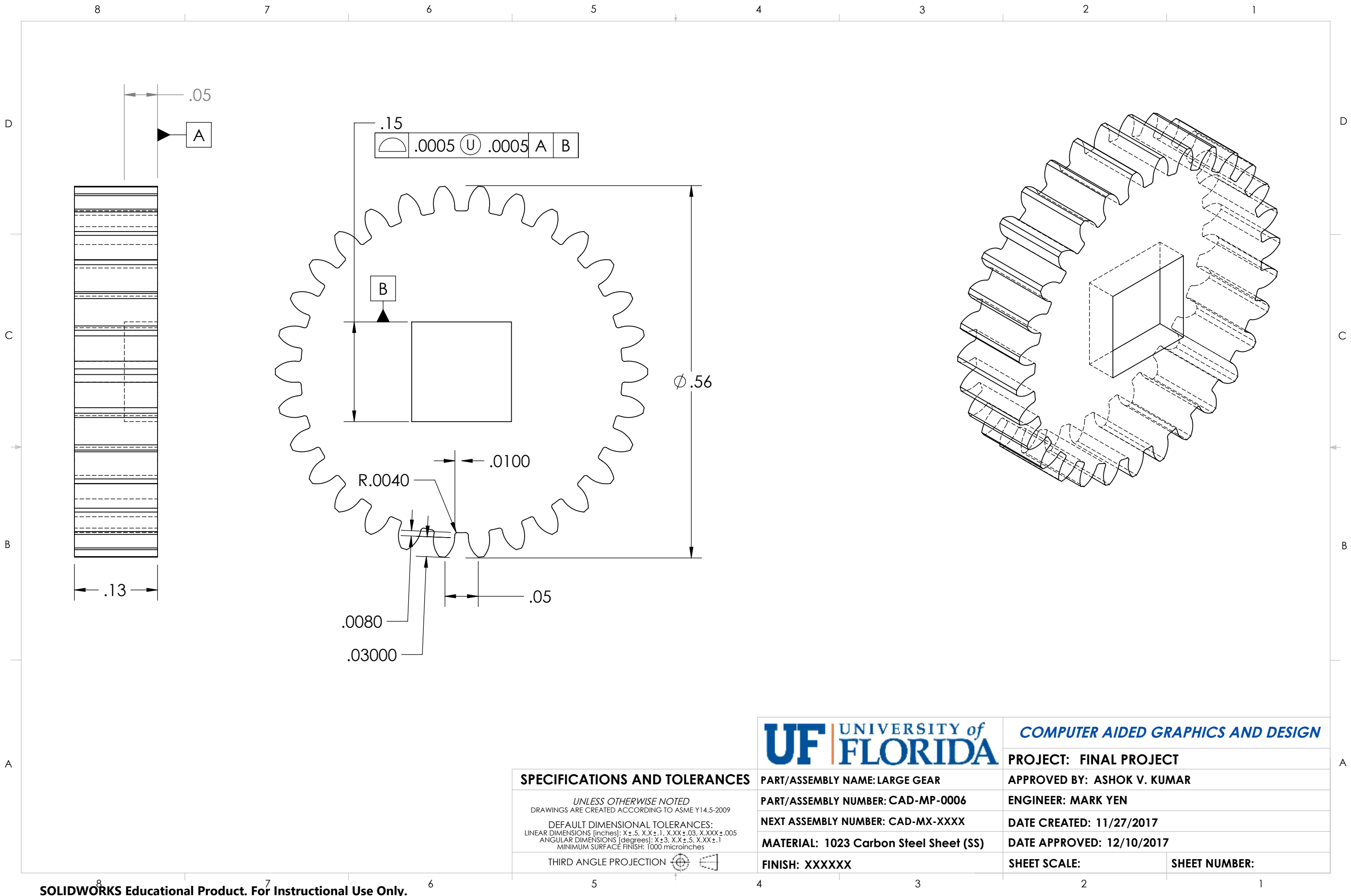


$\phi .0150^{+.00045}_{-.00000}$			
$\phi .005 \text{ (M)}$	A	B	
$\phi .0005$			

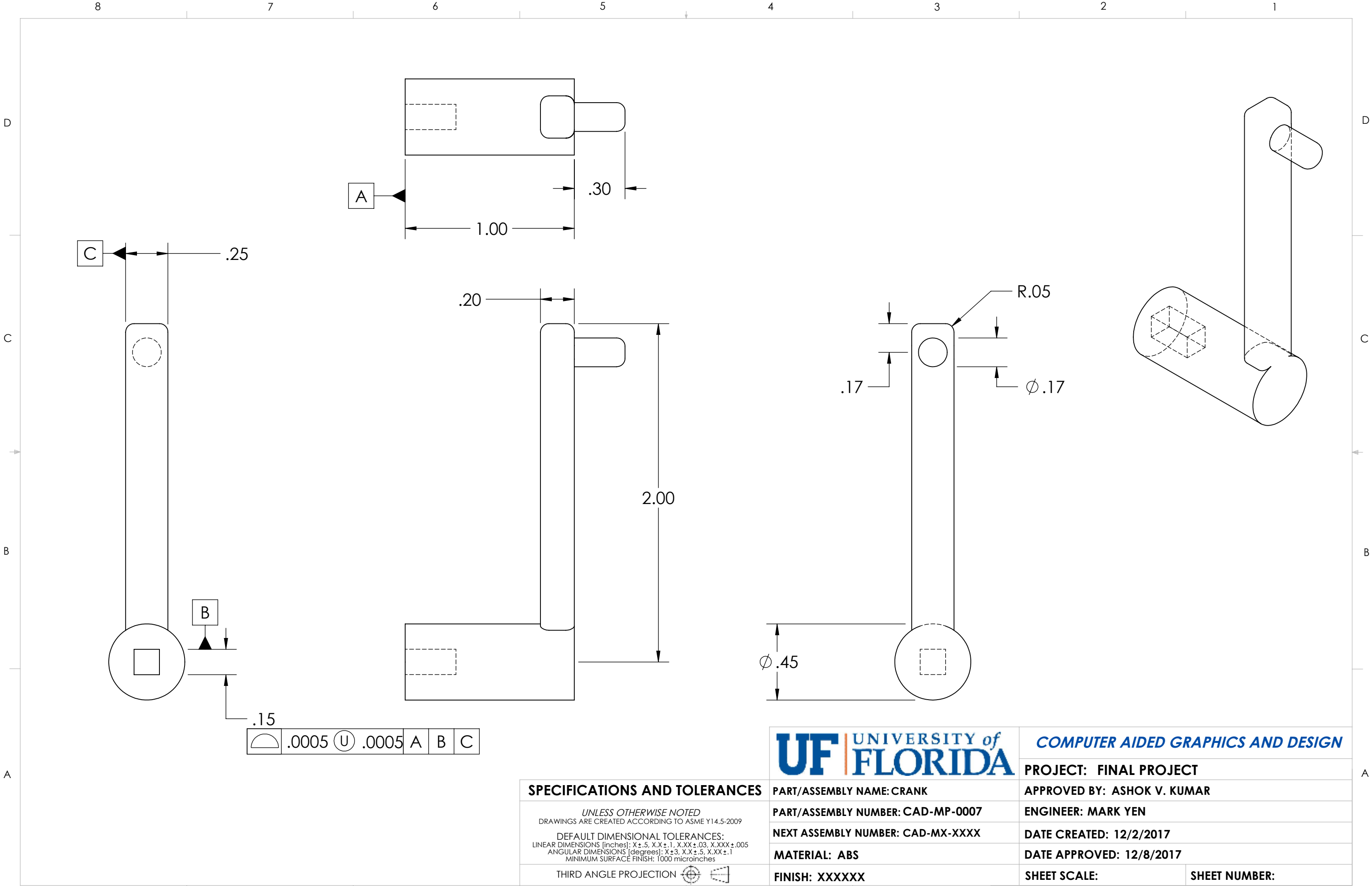
<b>SPECIFICATIONS AND TOLERANCES</b>	
UNLESS OTHERWISE NOTED DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009	
DEFAULT DIMENSIONAL TOLERANCES: LINEAR DIMENSIONS [inches]: X+.5, X.X+.1, X.XX+.03, X.XXX+.005 ANGULAR DIMENSIONS [degrees]: X+3, X.X+.5, X.XX+.1 MINIMUM SURFACE FINISH: 1000 microinches	
THIRD ANGLE PROJECTION	

		<b>COMPUTER AIDED GRAPHICS AND DESIGN</b>	
<b>PART/ASSEMBLY NAME:</b> SMALL GEAR		<b>PROJECT:</b> FINAL PROJECT	
<b>PART/ASSEMBLY NUMBER:</b> CAD-MP-0003		<b>APPROVED BY:</b> ASHOK V. KUMAR	
<b>NEXT ASSEMBLY NUMBER:</b> CAD-MX-XXXX		<b>ENGINEER:</b> MARK YEN	
<b>MATERIAL:</b> 1023 Carbon Steel Sheet (SS)		<b>DATE CREATED:</b> 11/27/2017	
<b>FINISH:</b> XXXXXX		<b>DATE APPROVED:</b> 12/10/2017	
		<b>SHEET SCALE:</b>	<b>SHEET NUMBER:</b>









**SPECIFICATIONS AND TOLERANCES**

UNLESS OTHERWISE NOTED  
DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009

DEFAULT DIMENSIONAL TOLERANCES:  
LINEAR DIMENSIONS [inches]: X+.5, X.X+.1, X.XX+.03, X.XXX+.005  
ANGULAR DIMENSIONS [degrees]: X+3, X.X+.5, X.XX+.1  
MINIMUM SURFACE FINISH: 1000 microinches

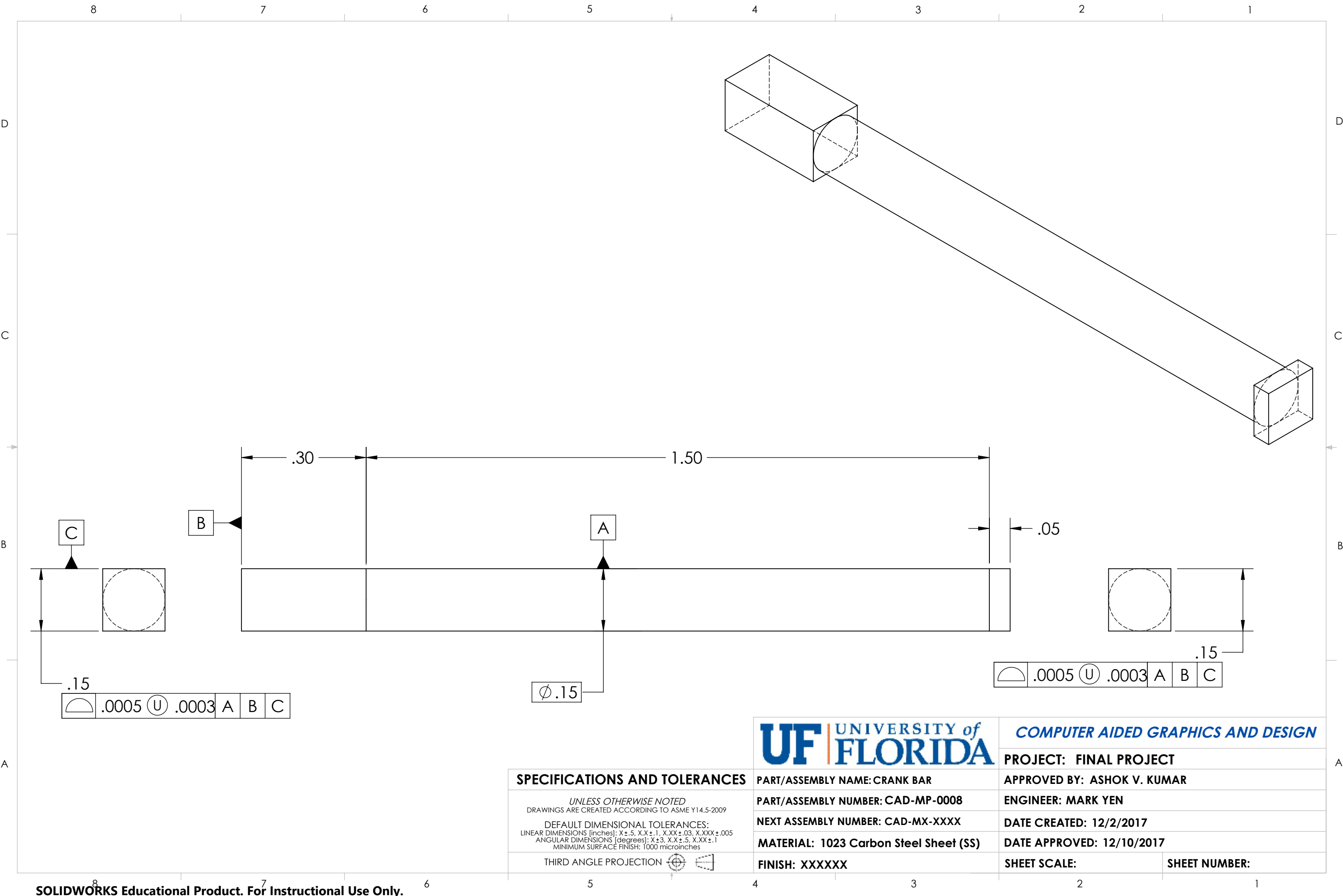
THIRD ANGLE PROJECTION



PART/ASSEMBLY NAME: CRANK
PART/ASSEMBLY NUMBER: CAD-MP-0007
NEXT ASSEMBLY NUMBER: CAD-MX-XXXX
MATERIAL: ABS
FINISH: XXXXXX

COMPUTER AIDED GRAPHICS AND DESIGN	
PROJECT: FINAL PROJECT	
APPROVED BY: ASHOK V. KUMAR	
ENGINEER: MARK YEN	
DATE CREATED: 12/2/2017	
DATE APPROVED: 12/8/2017	
SHEET SCALE:	SHEET NUMBER:





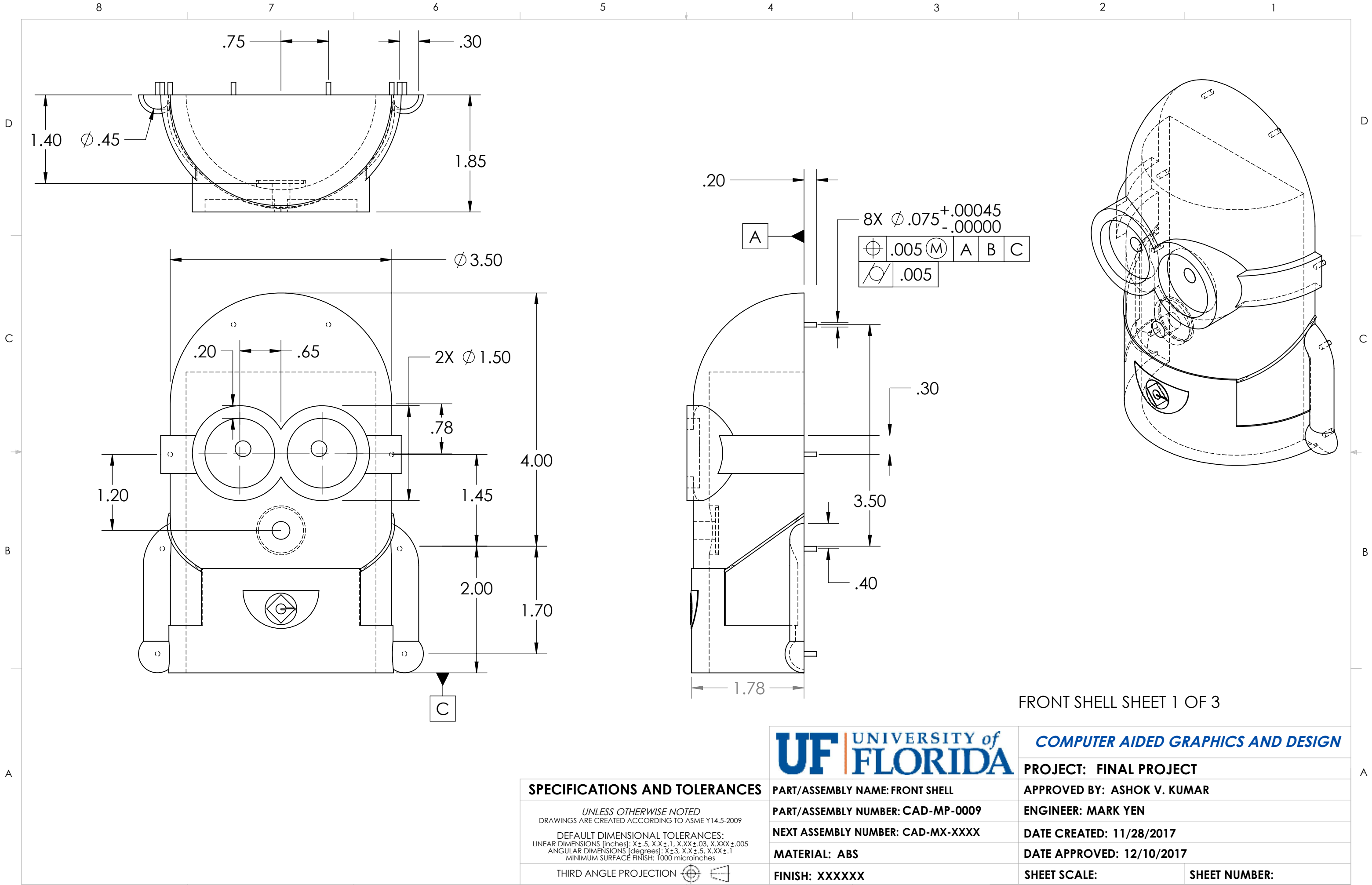
SPECIFICATIONS AND TOLERANCES	
UNLESS OTHERWISE NOTED DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009	
DEFAULT DIMENSIONAL TOLERANCES: LINEAR DIMENSIONS [inches]: X+.5, X.X+.1, X.XX+.03, X.XXX+.005 ANGULAR DIMENSIONS [degrees]: X+3, XX+.5, XXX+.1 MINIMUM SURFACE FINISH: 1000 microinches	
THIRD ANGLE PROJECTION	



PART/ASSEMBLY NAME: CRANK BAR
PART/ASSEMBLY NUMBER: CAD-MP-0008
NEXT ASSEMBLY NUMBER: CAD-MX-XXXX
MATERIAL: 1023 Carbon Steel Sheet (SS)
FINISH: XXXXXX

COMPUTER AIDED GRAPHICS AND DESIGN

PROJECT: FINAL PROJECT	
APPROVED BY: ASHOK V. KUMAR	
ENGINEER: MARK YEN	
DATE CREATED: 12/2/2017	
DATE APPROVED: 12/10/2017	
SHEET SCALE:	SHEET NUMBER:



8

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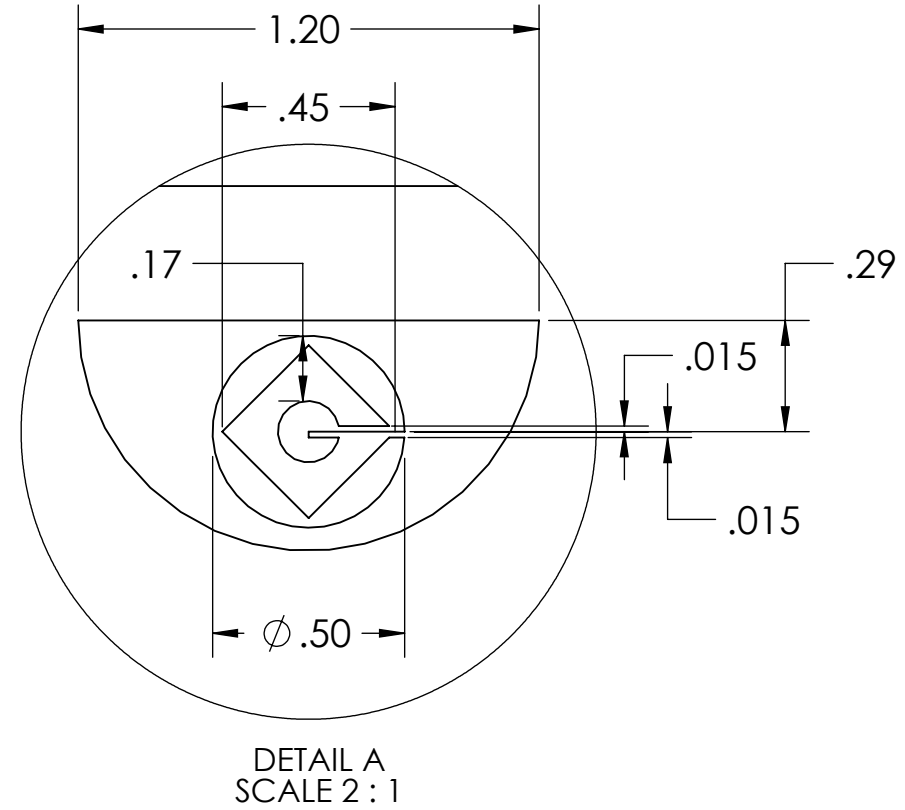
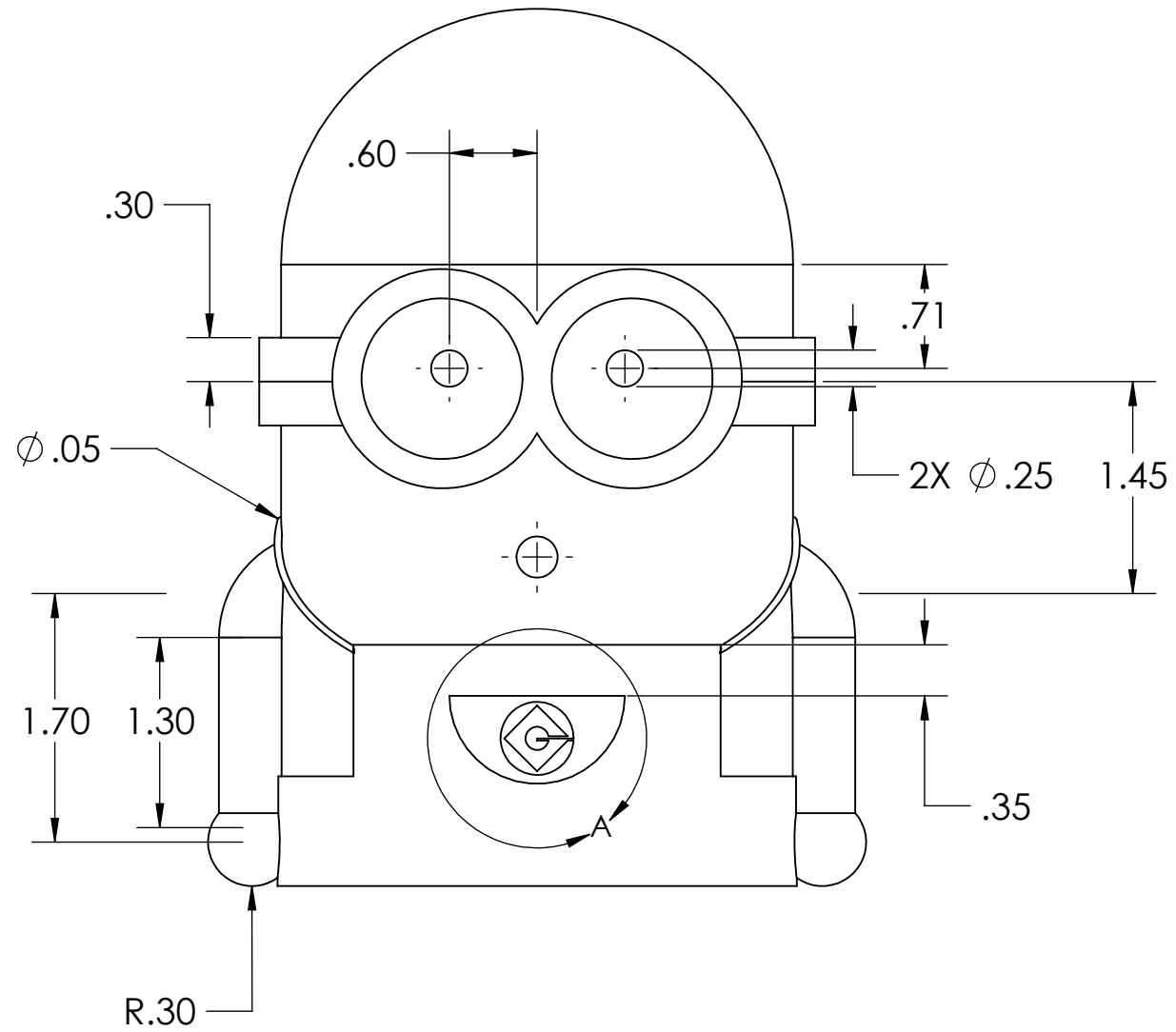
1

D

C

B

A



FRONT SHELL SHEET 2 OF 3



COMPUTER AIDED GRAPHICS AND DESIGN

PROJECT: FINAL PROJECT

APPROVED BY: ASHOK V. KUMAR

ENGINEER: MARK YEN

DATE CREATED: 11/28/2017

DATE APPROVED: 12/10/2017

SHEET SCALE:

SHEET NUMBER:

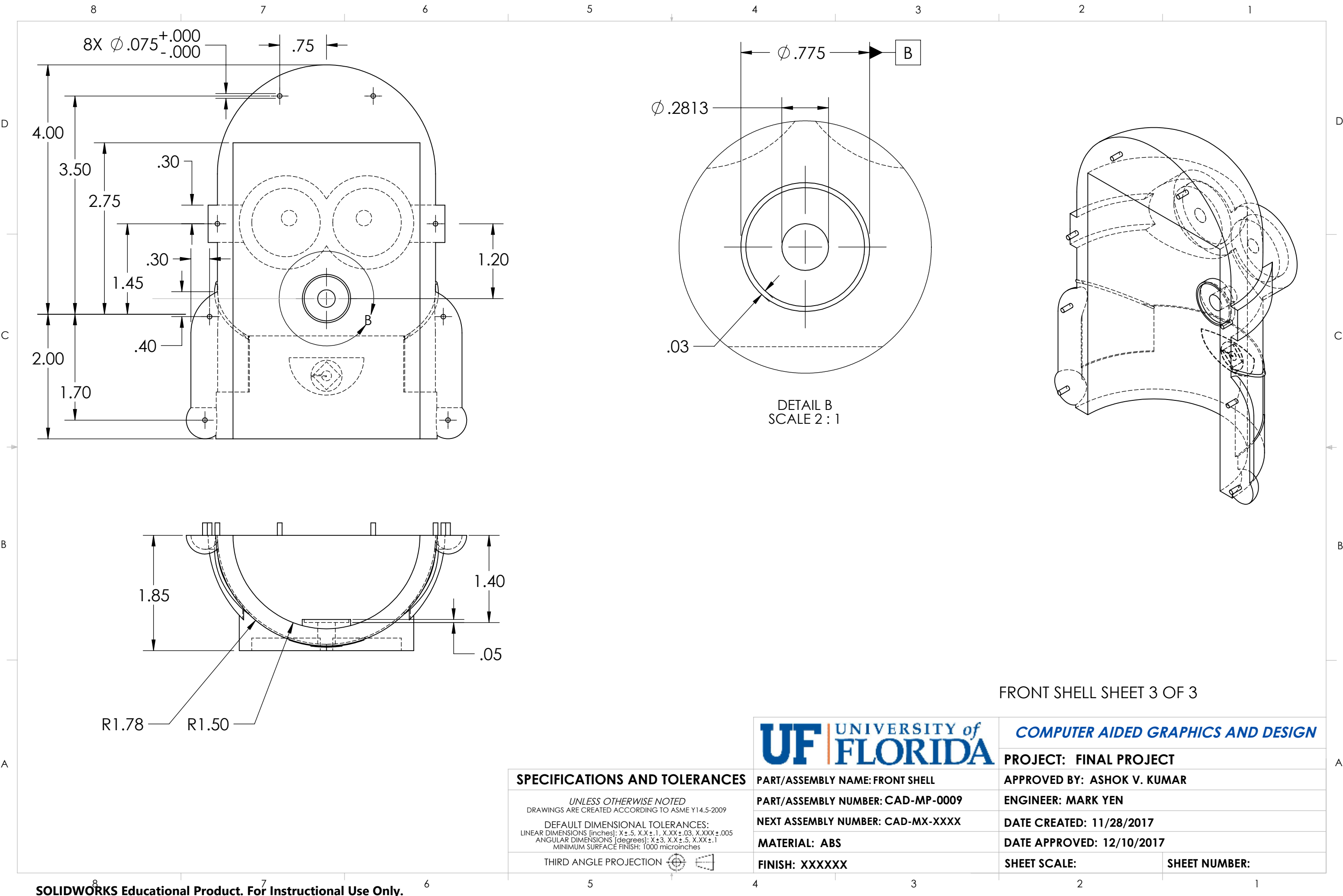
## SPECIFICATIONS AND TOLERANCES

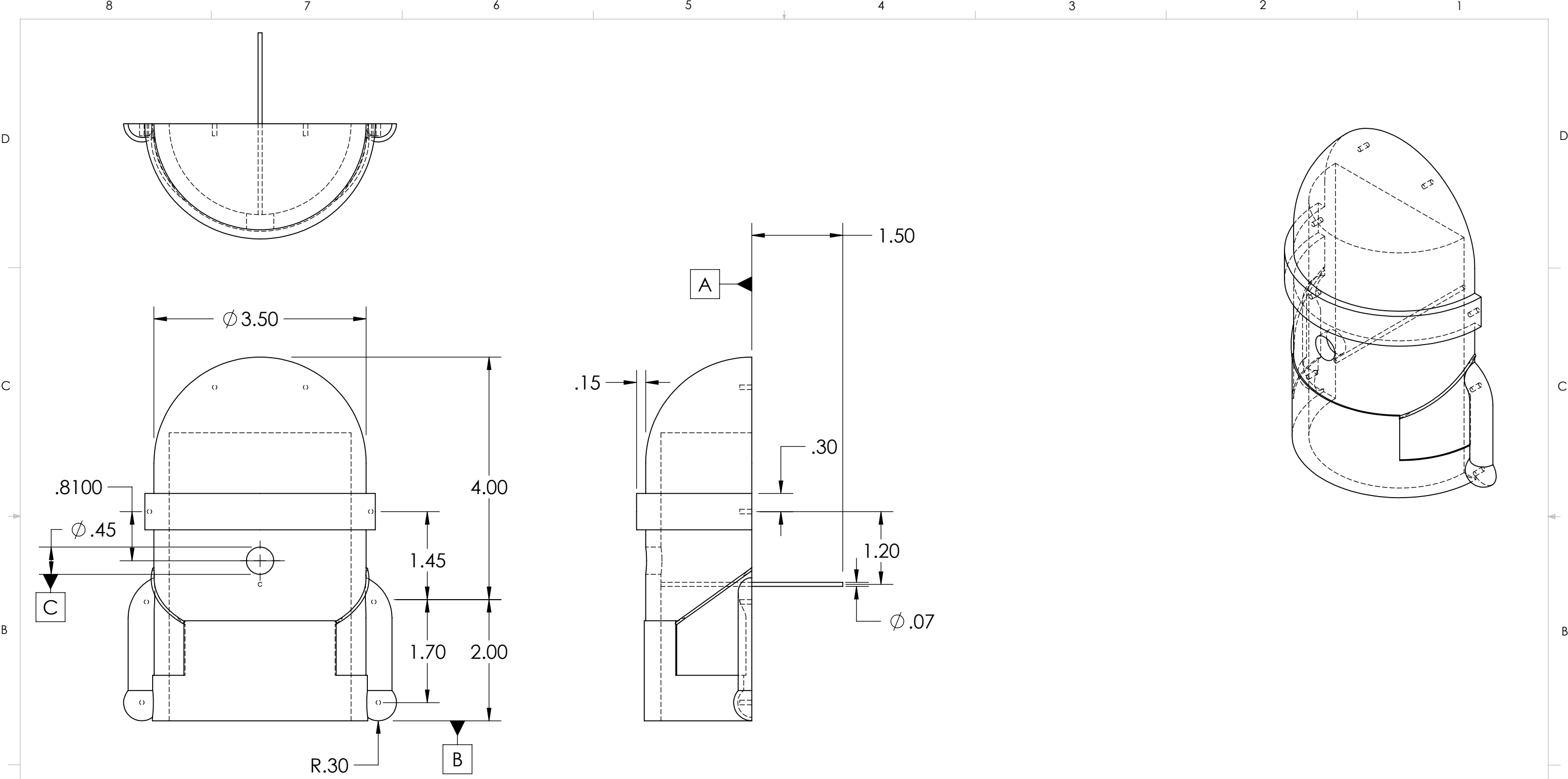
UNLESS OTHERWISE NOTED  
DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009

DEFAULT DIMENSIONAL TOLERANCES:  
LINEAR DIMENSIONS [inches]: X $\pm$ .5, X.X $\pm$ .1, X.XX $\pm$ .03, X.XXX $\pm$ .005  
ANGULAR DIMENSIONS [degrees]: X $\pm$ 3, X.X $\pm$ .5, X.XX $\pm$ .1  
MINIMUM SURFACE FINISH: 1000 microinches

THIRD ANGLE PROJECTION



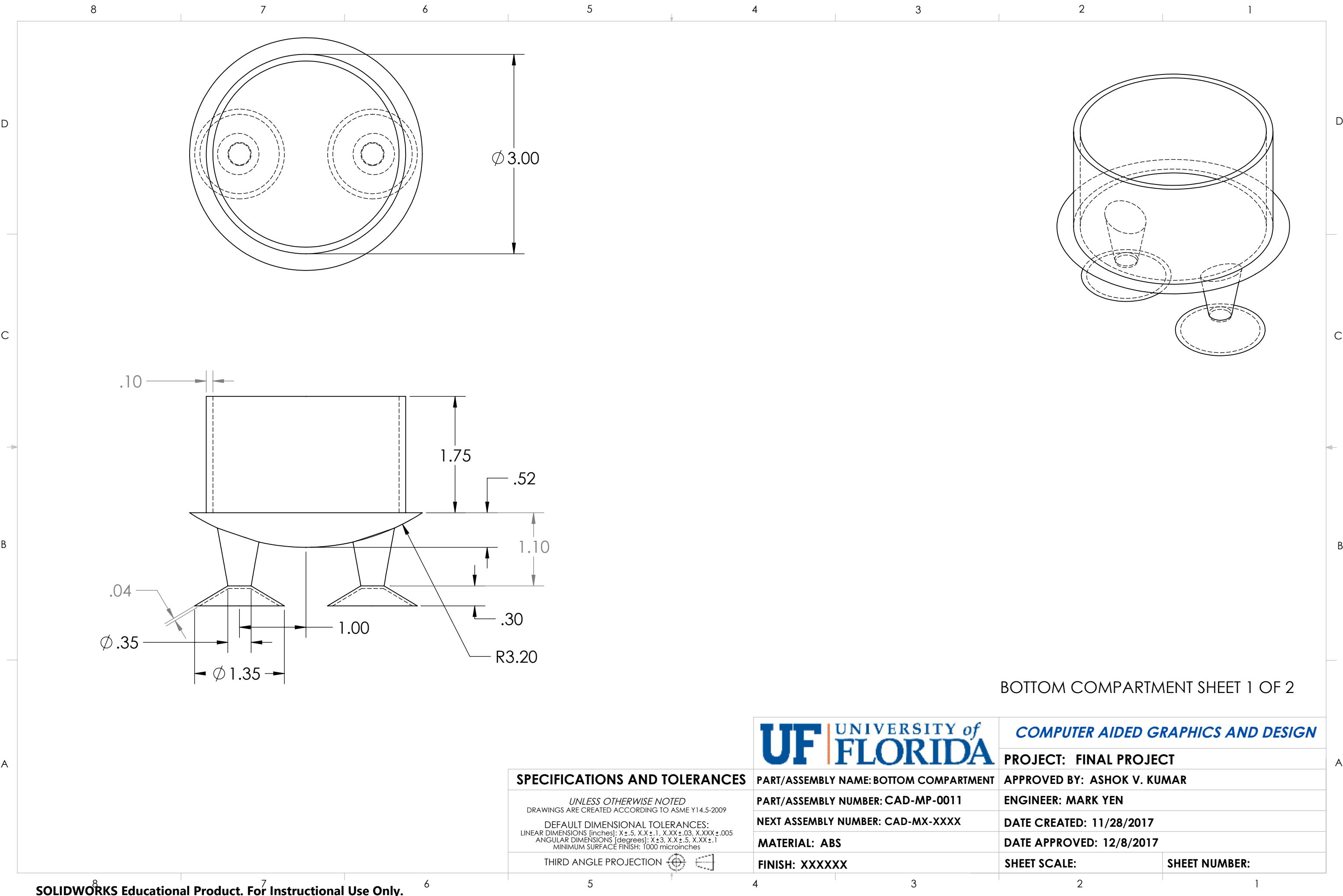




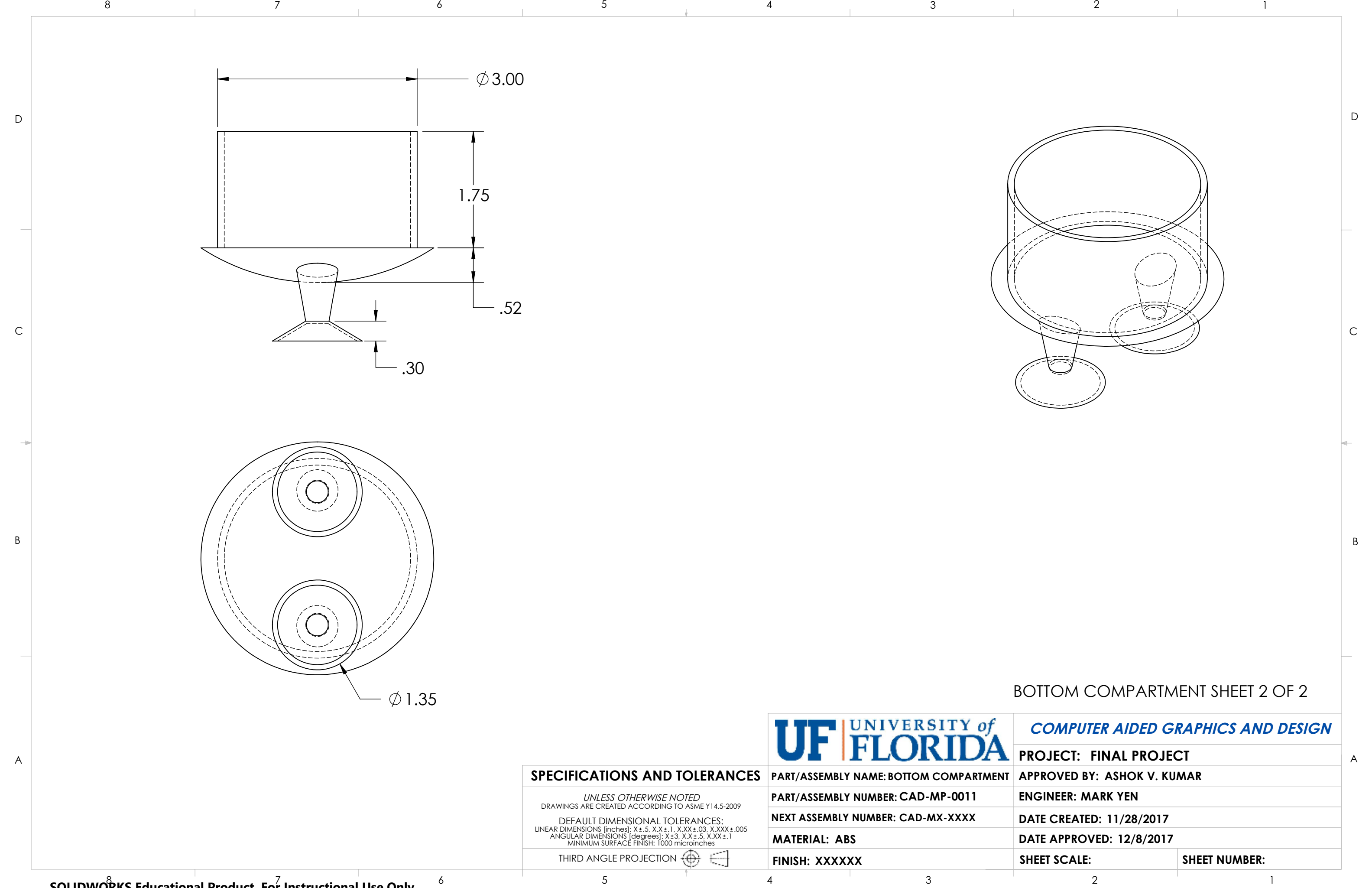
BACK SHELL SHEET 1 OF 2

<div><div>SPECIFICATIONS AND TOLERANCES</div><div><div>UNLESS OTHERWISE NOTED</div><div>DRAWINGS ARE CREATED ACCORDING TO ASME Y14.5-2009</div><div>DEFAULT DIMENSIONAL TOLERANCES:</div><div>LINEAR DIMENSIONS [inches]: X+.5, X.X+.1, X.XX+.03, X.XXX+.005</div><div>ANGULAR DIMENSIONS [degrees]: X+3, X.X+.5, X.XX+.1</div><div>MINIMUM SURFACE FINISH: 1000 microinches</div></div><div><div>THIRD ANGLE PROJECTION</div><div></div></div></div>	<div><div>UF</div><div>UNIVERSITY of FLORIDA</div></div>	COMPUTER AIDED GRAPHICS AND DESIGN	
	PART/ASSEMBLY NAME: BACK SHELL		PROJECT: FINAL PROJECT
	PART/ASSEMBLY NUMBER: CAD-MP-0010		APPROVED BY: ASHOK V. KUMAR
	NEXT ASSEMBLY NUMBER: CAD-MX-XXXX		ENGINEER: MARK YEN
	MATERIAL: ABS		DATE CREATED: 11/28/2017
FINISH: XXXXXX		DATE APPROVED: 12/9/2017	
		SHEET SCALE:	SHEET NUMBER:


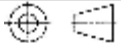








BOTTOM COMPARTMENT SHEET 2 OF 2

SPECIFICATIONS AND TOLERANCES			COMPUTER AIDED GRAPHICS AND DESIGN	
	PART/ASSEMBLY NAME: BOTTOM COMPARTMENT		PROJECT: FINAL PROJECT	
	PART/ASSEMBLY NUMBER: CAD-MP-0011		APPROVED BY: ASHOK V. KUMAR	
	NEXT ASSEMBLY NUMBER: CAD-MX-XXXX		ENGINEER: MARK YEN	
	MATERIAL: ABS		DATE CREATED: 11/28/2017	
THIRD ANGLE PROJECTION 	FINISH: XXXXXX		DATE APPROVED: 12/8/2017	
	SHEET SCALE:		SHEET NUMBER:	