

5	28Teeth_Driven_Gear	28 Teeth Gear_Driven	1
4	Double_Gear 14_28 Idler_2	Double Gear Idler 2	1
3	Double_Gear 30_14 Idler_1	Double Gear Idler_1	1
2	12Teeth	12 Teeth Driving Gear	1
1	BackPlane_Solid_Model	Backplane_for_Gear Train	1
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.

Compound Gear Train Assembly	-	Compound Gear Train
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED
DO NOT SCALE DRAWING
INTERPRET DIMENSIONS AND TOLERANCES
PER ASME Y14.5M-1994
DIMENSIONS ARE IN INCHES
TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± 1°
SURFACE ROUGHNESS	32 µ in

THIRD ANGLE PROJECTION

SolidWorks MAINTAINED DATA
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CUSTOMER
XYZ Company

PROJECT
Assignment 3

DRAWN BY
Vijay Prajwal

CHECKED BY
Prof. Tom Peterek

APPROVED
Prof. Tom Peterek

DATE
2021-07-20

DATE
2021-07-21

DATE
2021-07-21

C CONESTOGA
Connect Life and Learning

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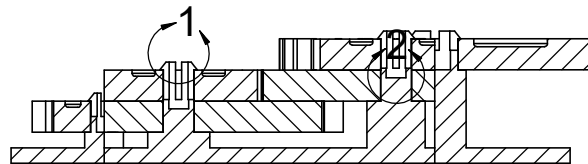
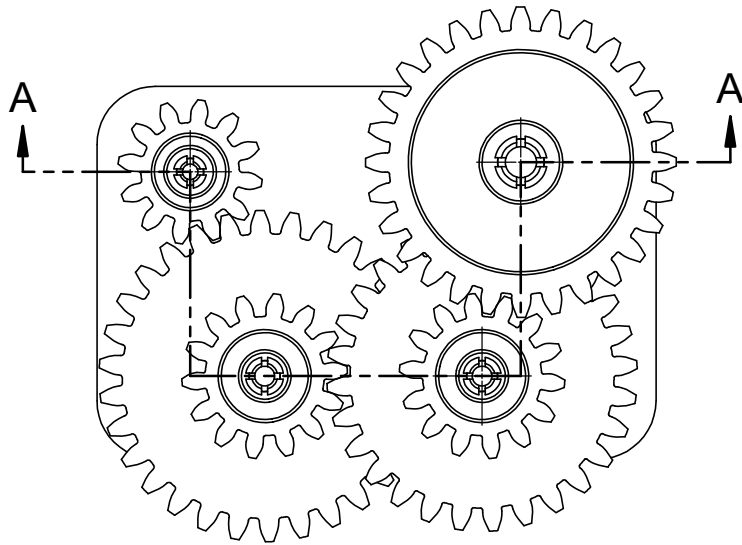
Compound Gear Train

B Drawing_Sheets_A3_Gear

SCALE 1:2

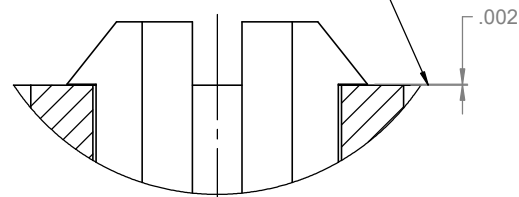
WEIGHT 13.07 lbs

SHEET 1 OF 7



SECTION A-A

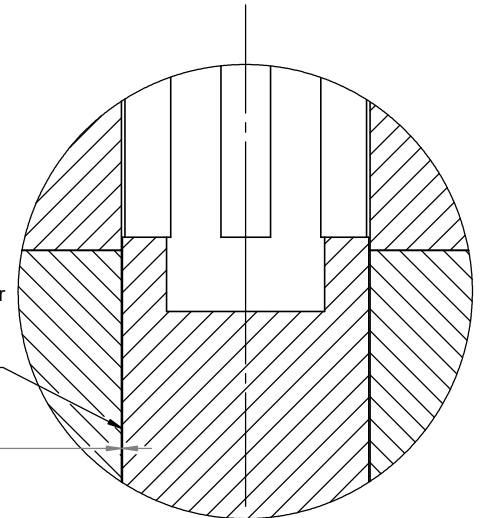
Leaving clearance gap between the gear top and to its snap fit for frictionless rotation. This clearance is left in all gears and its snap fit.



DETAIL 1
SCALE 4 : 1

Leaving clearance for frictionless rotation. This clearance is left in all of the gears.

.002



DETAIL 2
SCALE 4 : 1

Compound Gear Train Assembly	-	Compound Gear Train
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING
INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994
DIMENSIONS ARE IN INCHES
TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± 1°
SURFACE ROUGHNESS	32 µ in

THIRD ANGLE PROJECTION



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PROJECT

Assignment 3

DRAWN BY

Vijay Prajwal

CHECKED BY

Prof. Tom Peterek

APPROVED

Prof. Tom Peterek

DATE

2021-07-20

DATE

2021-07-21

DATE

2021-07-21



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Compound Gear Train

B Drawing_Sheets_A3_Gear

SCALE

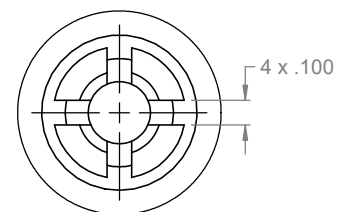
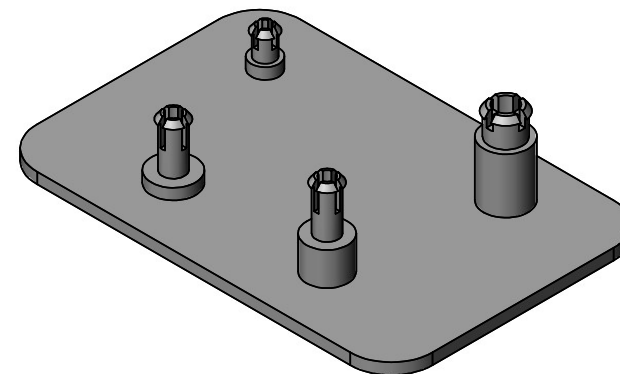
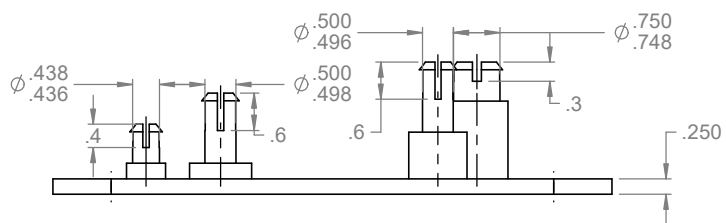
1:2

WEIGHT

13.07 lbs

SHEET 2 OF 7

1. DRAFT ANGLE: 38°
2. REMOVE IF ANY SHARP EDGES.



DETAIL N
SCALE 2 : 1

BackPlane_Solid_Model	-	Backplane_for_Gear Train
PART NUMBER	REV	DESCRIPTION

DO NOT SCALE DRAWING
INTERPRET DIMENSIONS AND TOLERANCES
SPECIFICATIONS AS SHOWN

TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± .1°
SURFACE ROUGHNESS	32 μ in

THIRD ANGLE PROJECTION



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CUSTOMER

XYZ Company
PROJECT

Assignment 3

DRAWN BY
Viley Drexel

CHECKED BY

CHECKED BY
Prof. Tom Pet

DATE	2004.03.09
------	------------

2021-07-20
DATE

DATE	2021-07-21
------	------------



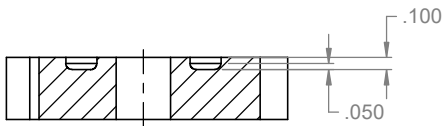
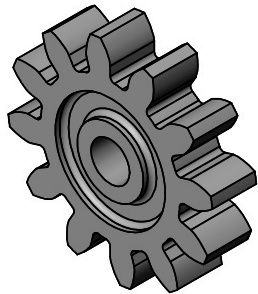
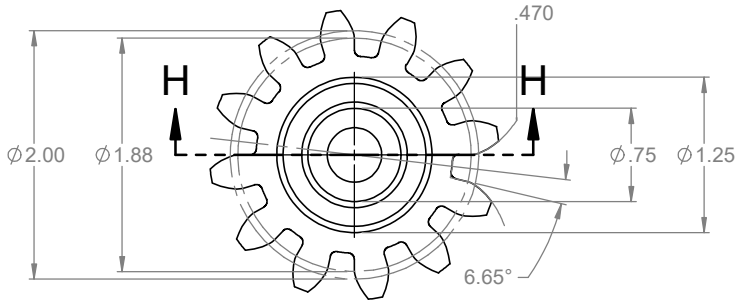
299 Doon Valley Drive, Kitchener, ON, N2G 4M4

TITLE
Backplane_for_Gear Train

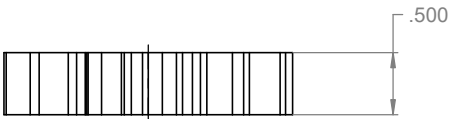
SIZE	DRAWING NO	REVISION
B	Drawing Sheets A3 Gear -	

SCALE	1:2	WEIGHT	4.45 lbs	SHEET 3 OF 7
-------	-----	--------	----------	--------------

- NOTES:
- 1. Pressure Angle: 20°
 - 2. Modulus: 0.166 in.
 - 3. Diametral Pitch: 6 in.
 - 4. Number of Teeth: 12.
 - 5. All fillet radius 0.05 in unless specified.



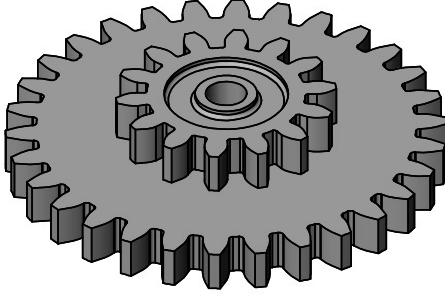
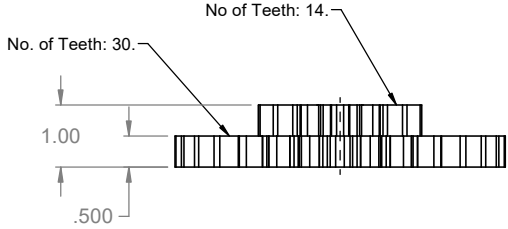
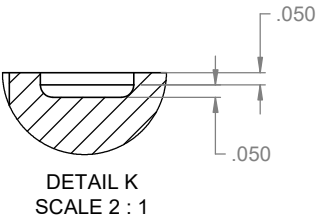
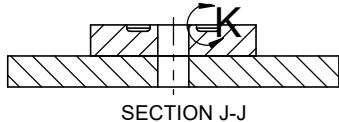
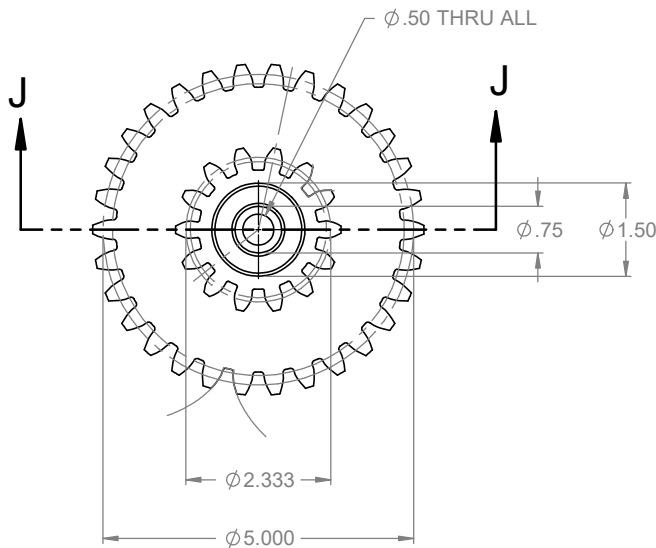
SECTION H-H
SCALE 1 : 1



12Teeth	-	12 Teeth Driving Gear
PART NUMBER	REV	DESCRIPTION

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DO NOT SCALE DRAWING		INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994		PROPRIETARY		NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM, WITHOUT THE WRITTEN PERMISSION OF Conestoga College	
DIMENSIONS ARE IN INCHES		TOLERANCES APPLY AS SHOWN BELOW		CUSTOMER XYZ Company		PROJECT Assignment 3	
0 PL DEC ± 0.2		1 PL DEC ± 0.1		DRAWN BY Vijay Prajwal		DATE 2021-07-20	
2 PL DEC ± 0.01		3 PL DEC ± 0.005		CHECKED BY Prof. Tom Peterek		DATE 2021-07-21	
ANGLES ± 1°		SURFACE ROUGHNESS 32 µ in		APPROVED Prof. Tom Peterek		DATE 2021-07-21	
THIRD ANGLE PROJECTION		SCALE 1:2		WEIGHT 0.39 lbs		SHEET 4 OF 7	

- NOTES:
- 1. Pressure Angle: 20°
 - 2. Modulus: 0.166 in.
 - 3. Diametral Pitch: 6 in.
 - 4. All fillet radius 0.05 in unless specified.



Double Gear Idler 1

Double_Gear_30_14 Idler_1	-	Double Gear Idler_1
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994

DIMENSIONS ARE IN INCHES

TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± 1°
SURFACE ROUGHNESS	32 µ in

THIRD ANGLE PROJECTION

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CUSTOMER: XYZ Company

PROJECT: Assignment 3

DRAWN BY: Vijay Prajwal

CHECKED BY: Prof. Tom Peterek

APPROVED: Prof. Tom Peterek

DATE: 2021-07-20

DATE: 2021-07-21

DATE: 2021-07-21

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Connect Life and Learning

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TITLE: **Double Gear Idler_1**

SIZE: **B**

DRAWING NO: **Drawing_Sheets_A3_Gear**

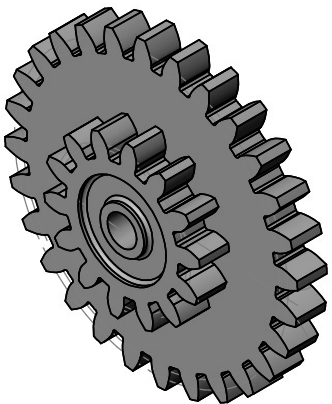
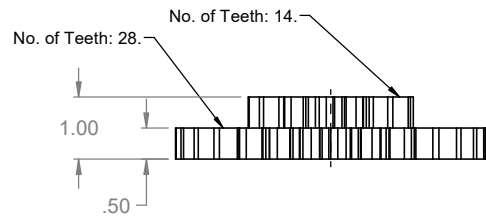
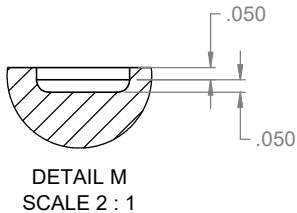
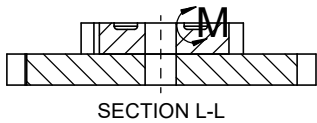
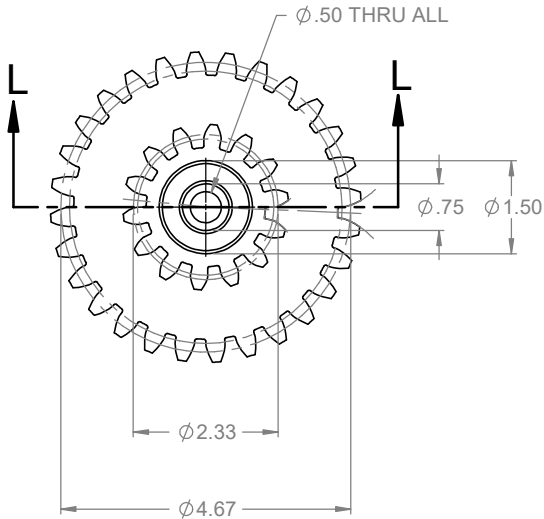
SCALE: 1:2

WEIGHT: 3.28 lbs

REVISION:

SHEET 5 OF 7

- NOTES:
- 1. Pressure Angle: 20°
 - 2. Modulus: 0.166 in.
 - 3. Diametral Pitch: 6 in.
 - 4. All fillet radius 0.05 in unless specified.



Double_Gear_14_28 Idler_2	-	Double_Gear_Idler 2
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING
INTERPRET DIMENSIONS AND TOLERANCES
PER ASME Y14.5M-1994
DIMENSIONS ARE IN INCHES
TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± 1°
SURFACE ROUGHNESS	32 µ in

THIRD ANGLE PROJECTION



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PROJECT
Assignment 3

DRAWN BY Vijay Prajwal	DATE 2021-07-20
CHECKED BY Prof. Tom Peterek	DATE 2021-07-21
APPROVED Prof. Tom Peterek	DATE 2021-07-21

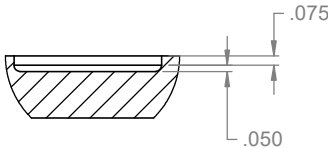
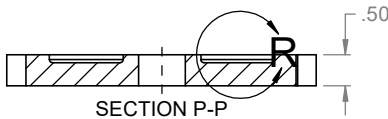
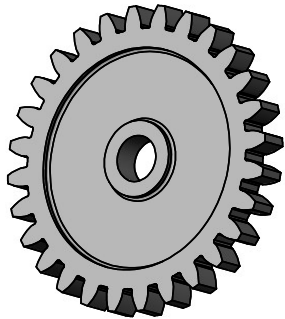
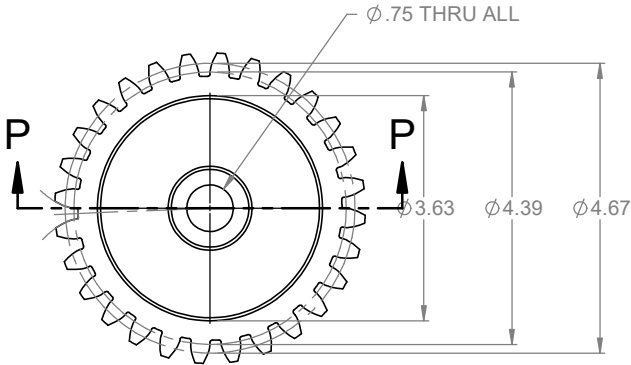


299 Doon Valley Drive, Kitchener, ON, N2G 4M4

Double Gear_Idler 2

SIZE B	DRAWING NO. Drawing_Sheets_A3_Gear	REVISION
SCALE 1:2	WEIGHT 2.92 lbs	SHEET 6 OF 7

- NOTES:
- 1. Pressure Angle: 20°
 - 2. Modulus: 0.166 in.
 - 3. Diametral Pitch: 6 in.
 - 4. Number of Teeth: 12.
 - 5. All fillet radius 0.05 in unless specified.



DETAIL R
SCALE 1 : 1



28Teeth_Driven_Gear	-	28 Teeth Gear_Driven
PART NUMBER	REV	DESCRIPTION

UNLESS OTHERWISE SPECIFIED

DO NOT SCALE DRAWING

INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994

DIMENSIONS ARE IN INCHES

TOLERANCES APPLY AS SHOWN BELOW

0 PL DEC	± 0.2
1 PL DEC	± 0.1
2 PL DEC	± 0.01
3 PL DEC	± 0.005
ANGLES	± 1°
SURFACE ROUGHNESS	32 µ in

THIRD ANGLE PROJECTION

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PROJECT
Assignment 3

DRAWN BY
Vijay Prajwal

CHECKED BY
Prof. Tom Peterek

APPROVED
Prof. Tom Peterek

DATE
2021-07-20

DATE
2021-07-21

DATE
2021-07-21

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299 Doon Valley Drive, Kitchener, ON, N2G 4M4

28 Teeth Gear_Driven

B Drawing_Sheets_A3_Gear

SCALE: 1:2

WEIGHT: 2.03 lbs

SHEET 7 OF 7