

ME 1403 Engineering Practice & Graphics

Fall - 2017

Lecture 2

Instructor:

Syed Hasib Akhter Faruqui

[Email: shafnehal@gmail.com](mailto:shafnehal@gmail.com)

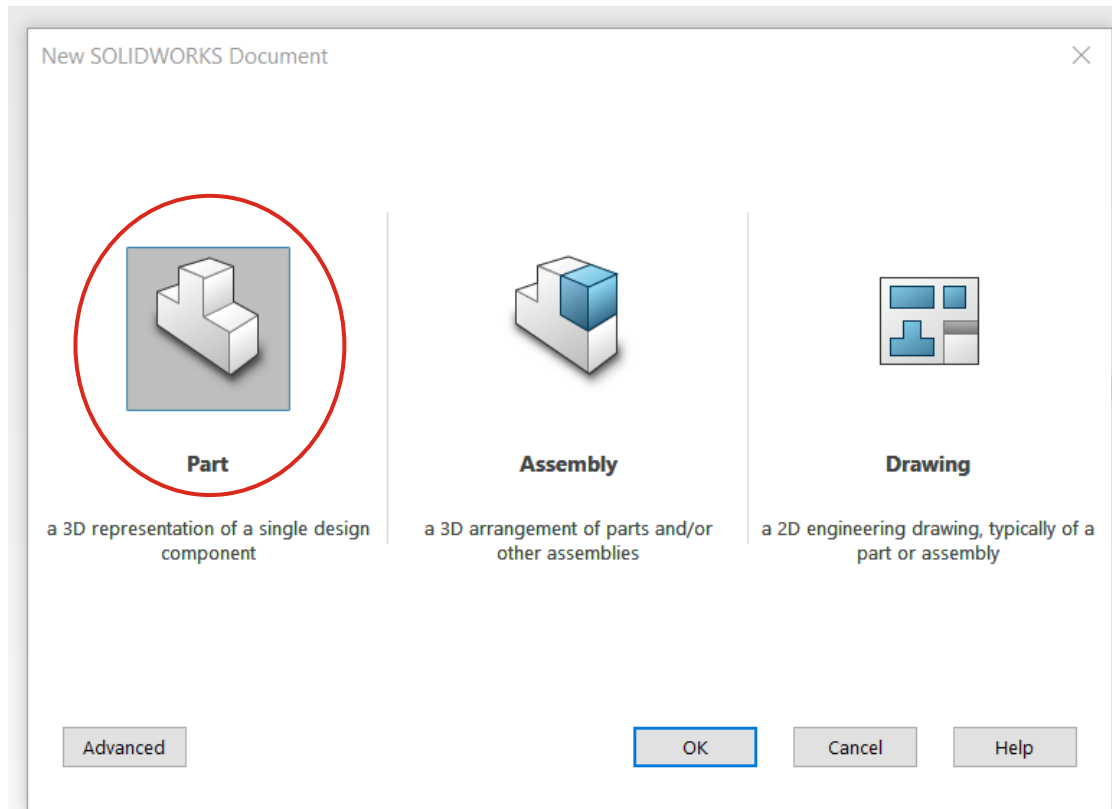
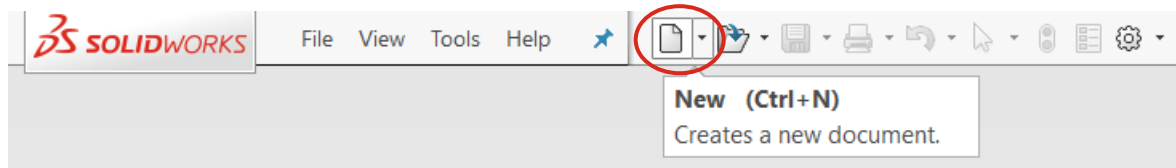
Recommended Textbook

S. Tickoo, ***SolidWorks 2016 for Designers***, 14th ed., 2016, CAD/CIM Technologies, ISBN: 978-1-942689-18-8.

Outline

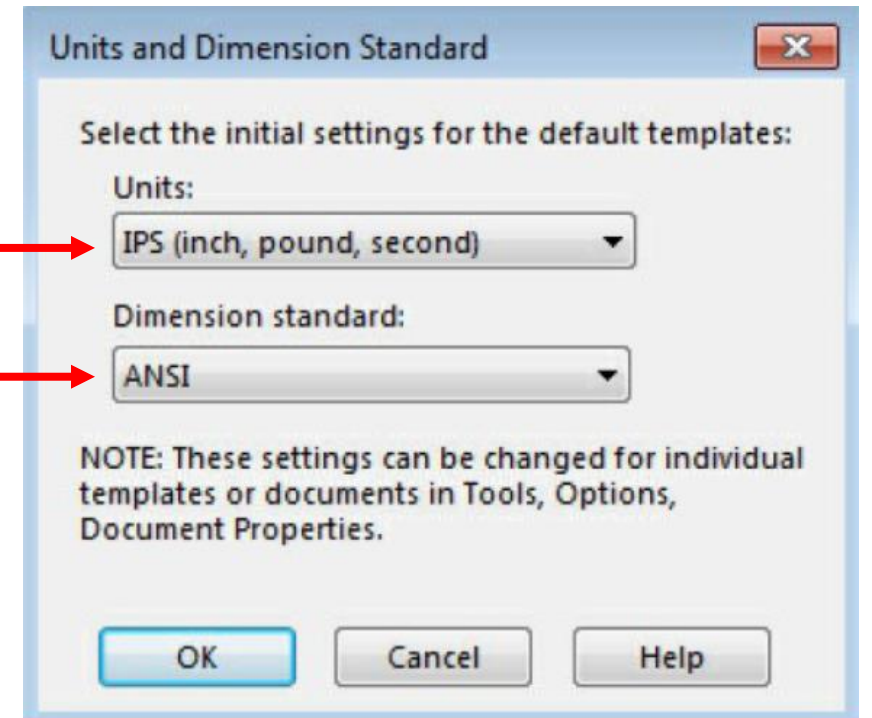
- Setting up Units and Dimension Standard
 - Drawing Standard (**ISO/ANSI**)
 - Unit System (**MKS/MMGS**)
- Mouse Gestures
- Sketching
 - Plane
 - Line
 - Construction Line/ Centerline
 - Circle
 - Dimensioning
 - View Tools
- In Class Practice
 - Tutorial-1

Setting up Units and Dimension Standard



MMGS

ISO



Setting up Units and Dimension Standard (cont'd)

The screenshot shows the SolidWorks interface with the 'Document Properties - Units' dialog box open. The 'Tools' menu is circled in red. In the 'Document Properties' tree, 'Units' is circled in red. The 'Unit system' section has 'MMGS (millimeter, gram, second)' selected and circled in red. A dropdown menu is open showing 'MMGS (millimeter, gram, second)' selected and circled in red. The 'Options...' button at the bottom is circled in red. The status bar at the bottom right shows 'MKS' circled in red.

Document Properties - Units

System Options **Document Properties** Search Options

Drafting Standard
Annotations
Dimensions
Virtual Sharps
Tables
DimXpert
Detailing
Grid/Snap
Units
Model Display
Material Properties
Image Quality
Sheet Metal
Weldments
Plane Display
Configurations

Unit system
 MKS (meter, kilogram, second)
 CGS (centimeter, gram, second)
 MMGS (millimeter, gram, second)
 IPS (inch, pound, second)
 Custom

Type	Unit	Decimals	Fractions	More
Basic Units				
Length	millimeters	.12		...
Dual Dimension Length	inches	.12		...
Angle	degrees	.12		
Mass/Section Properties				
Length	millimeters	.12		
Mass	grams			
Per Unit Volume	millimeters^3			
Motion Units				
Time	second	.12		

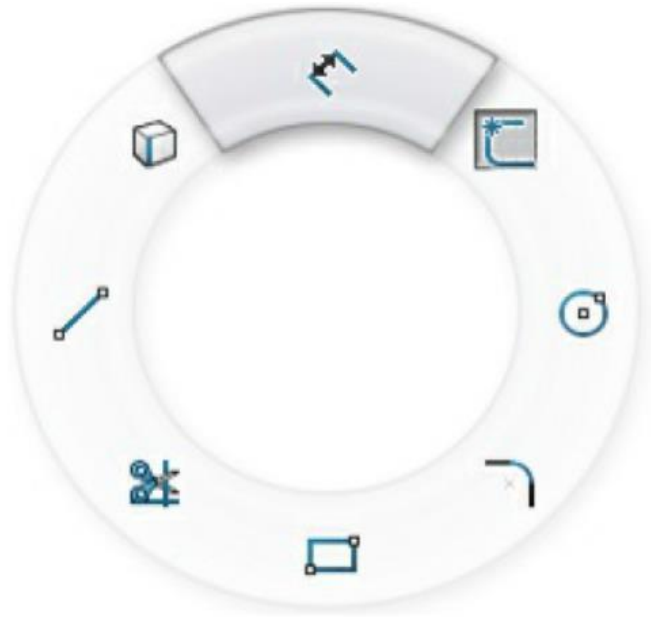
Decimal rounding
 Round half away from zero
 Round half towards zero

OK Cancel Help

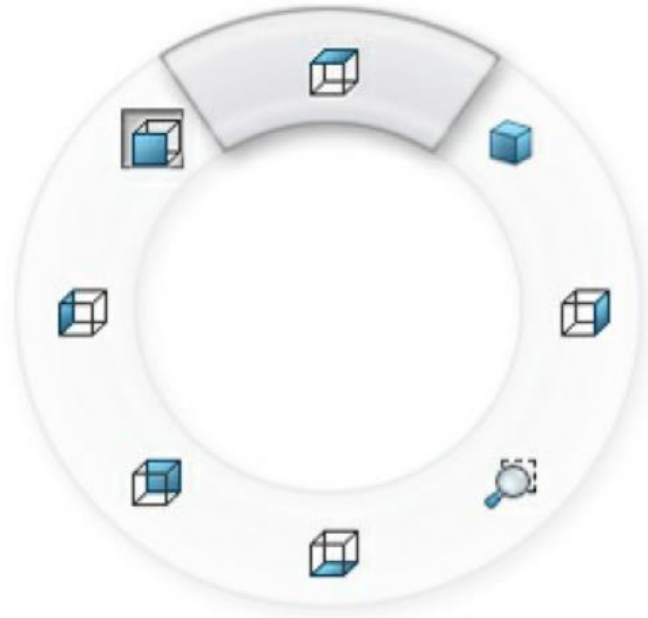
MKS

Mouse Gestures

- Press the Right Mouse Button
- Drag the Cursor in any Direction



Sketching

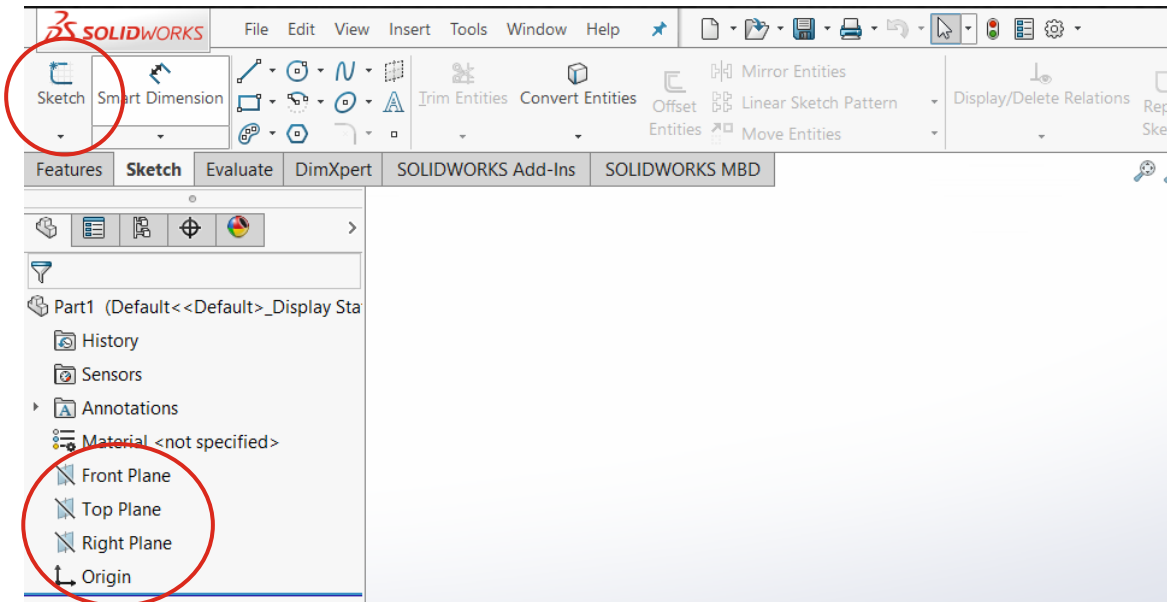
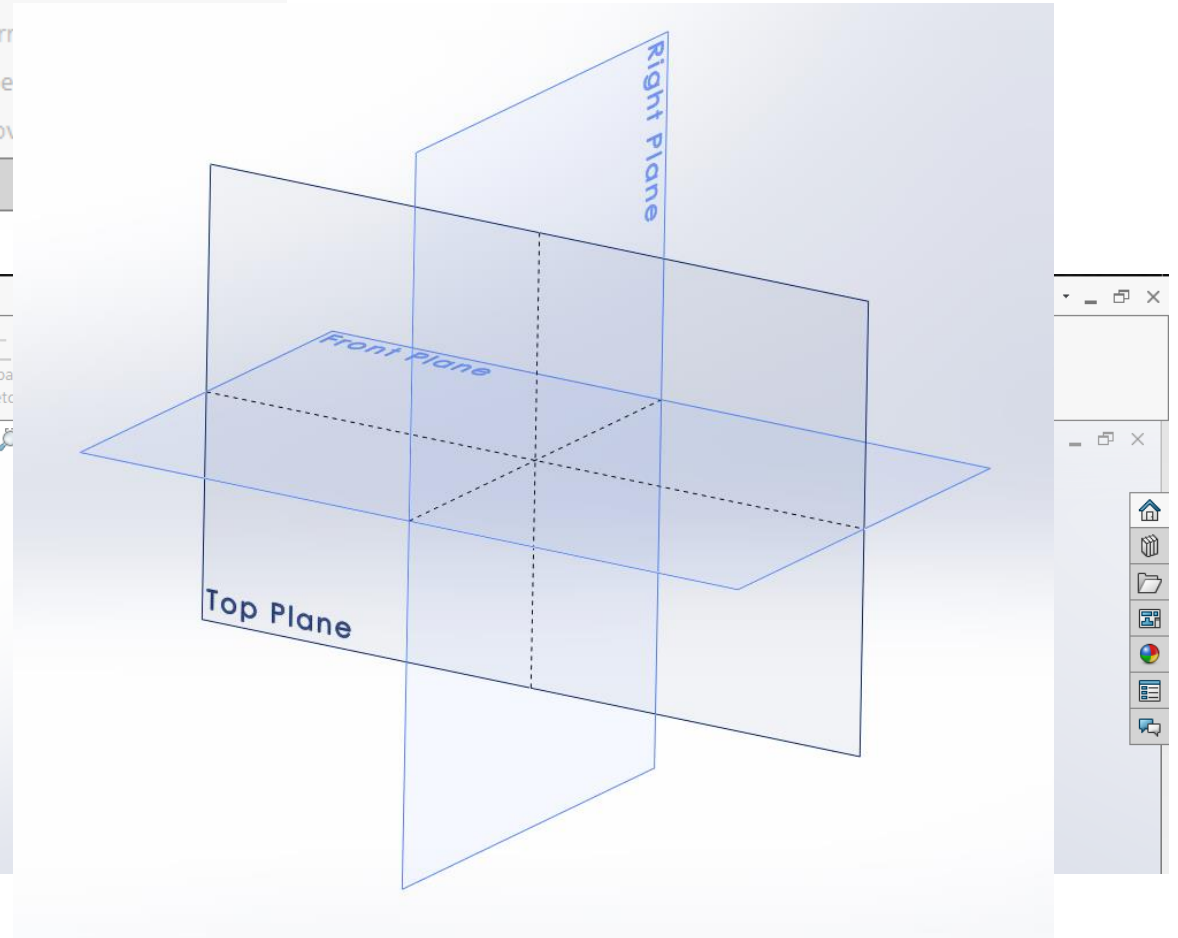
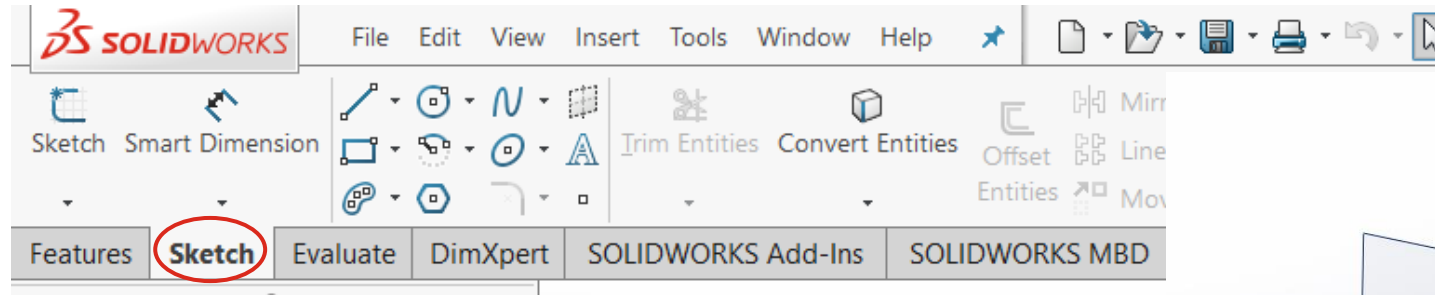


Part

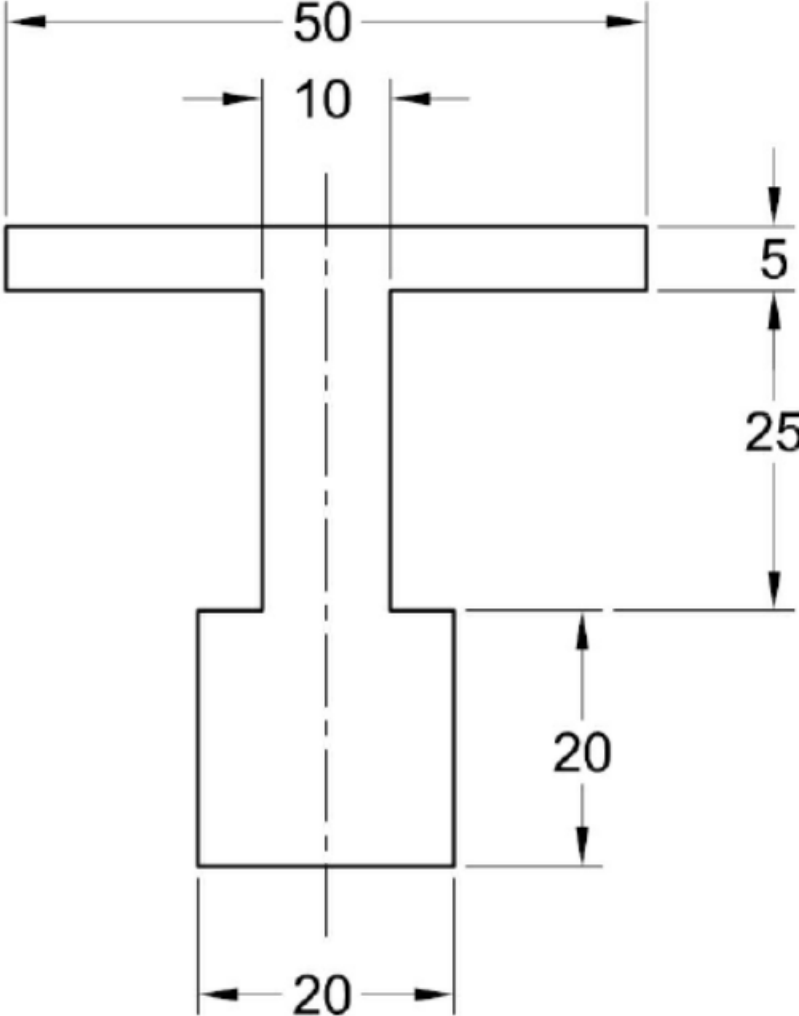


Drawing

Sketching



Tutorial-1



Submission Rules

- Homework's are due **at the beginning of the first lab** of the following week (*More Discussion on next class*).
- Quiz's will be taken (*More Discussion on next class*).
- Submit everything via **Blackboard**.
- Copying your assignments are **prohibited**. If you do so, you and the individual you copied from will receive a **grade zero**, plus both of you will be referred for actions as described in the university's policy for academic dishonesty. ([Read Section 203 of the Student Code of Conduct 2013-2013 UTSA Information Bulletin.](#)).

Submission Rules

- Any submission after deadline **will not be accepted** and thus will receive a **grade of zero**.
- Grading Criteria for Late Submission:
 - Submission on Time : 100%
 - Submission a week late : 75%
 - Submission two week late : 0%
- Naming Convention for your submission files:
 - *(your myUTSA id)_(Number/Name of the HomeWork)*
- For Example if your myUTSA id is “**abc123**” and You are submitting “**HW1**”. Then your submission file name should be “**abc123_HW1**”.