

A toy block with 6 sides of shapes.
5 points- Create a 2"x2"x2" Block
60 points- Views/sides



20 points Aesthetics

15 points- Planning & File
Admin

20 points Aesthetics

All sides colored

Minimum 3 colors used

No pieces exceeding past the frame

15 points- Planning & File Admin

Sketched idea sheet

File named last name first name Alpha Cube

ex- SmithJohn AlphaCube



60 pts- 3-6 drawings 2 Letters + 2 shapes

15 pts- All sides have a shape

If you create only 4 shapes then you must match the shapes symmetrically (Front-Back, Top-Bottom, L-Side-R-Side)

10 pts- Shapes must have depth (thickness)

10 pts- 1 shape must have curves  

10 pts- 1 shape must have 2 corners $>/< 90$ deg.  

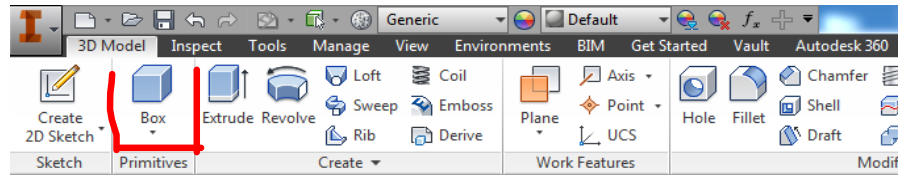
10 pts- All sides have a .25" frame & center is inset .125"

10 pts- Block finished by 3/7-8 Printed by 3/10-11

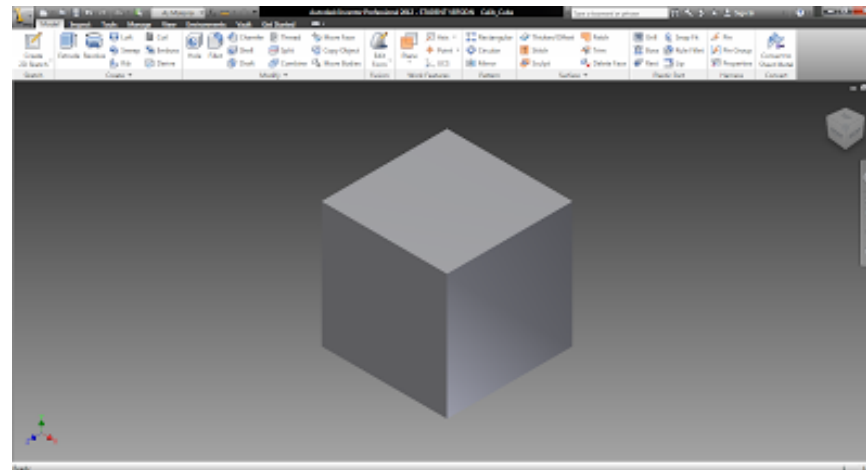
***It is suggested that letters be placed on opposite sides but alternate placement is allowed with design explanation.**

End Date 3/7-8

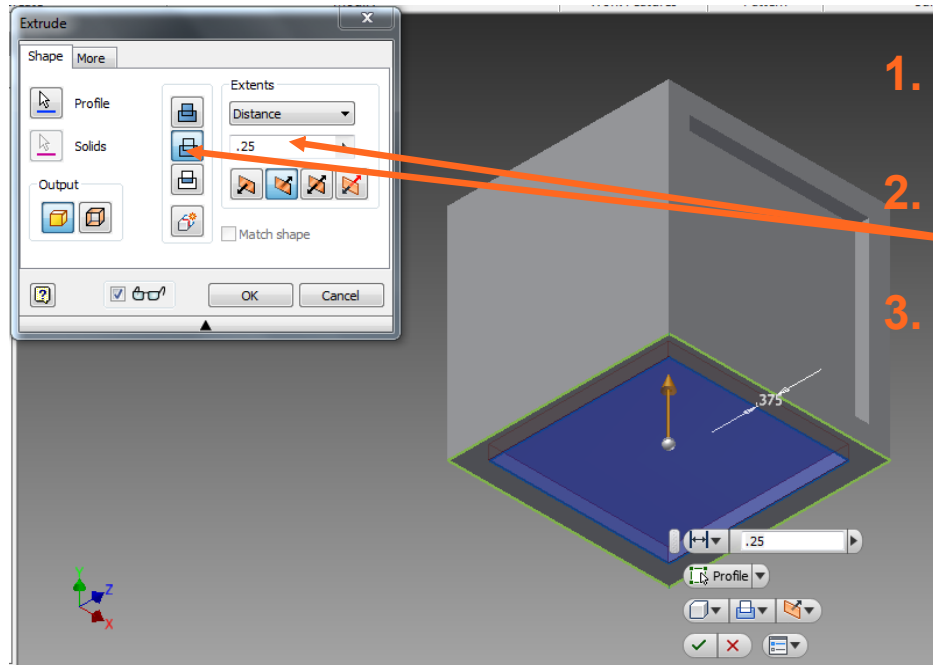
1. New standard *.ipt
2. File save as LastName First Name Alpha Block
3. Select Box from tool ribbon then select front view from Navi. Cube



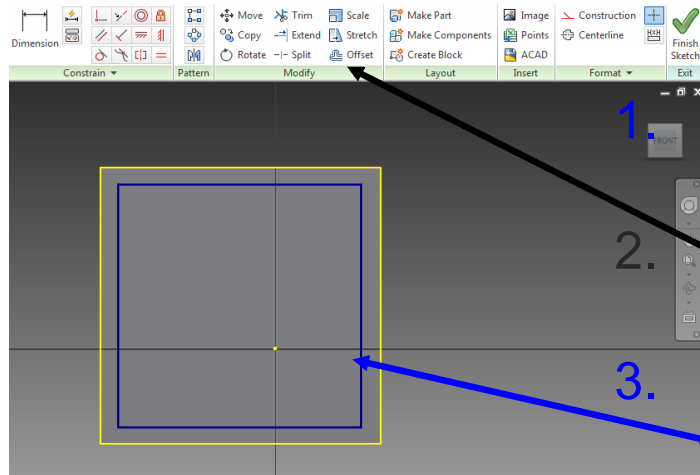
4. click on the center of the drawing area and create an approximate square. Then click again to set the object.
5. You will be asked to set the extrusion immediately enter the value 2 in the object will appear 3 dimensional.



After you finish your 2-D Sketch you need to extrude.



1. Select extrude, then select the inner square.
2. Select cut and set the distance to .125"
3. Select ok



Create borders on each side

1. Select 2D sketch then select a face (view)

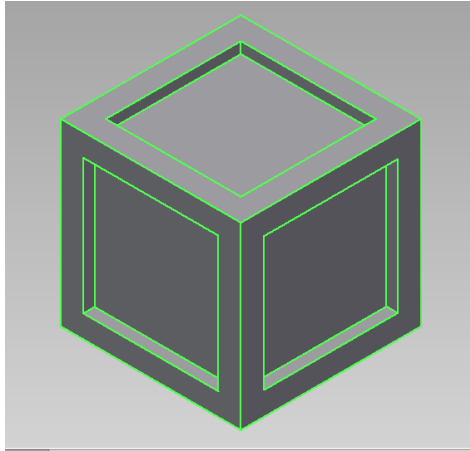
2. Select Offset- it towards the right in the ribbon bar.

3. Select the outer edge then size the box inside the box. Click once to release the square in close to the correct size.

4. Dimension the space between the outer edge and the inner box to .25

Be careful when you work other sides. You may accidentally select the hidden surface instead of the outer edge.

*The hidden surface may be shown as a solid white line, red line or dashed green line. Please try not to select it.

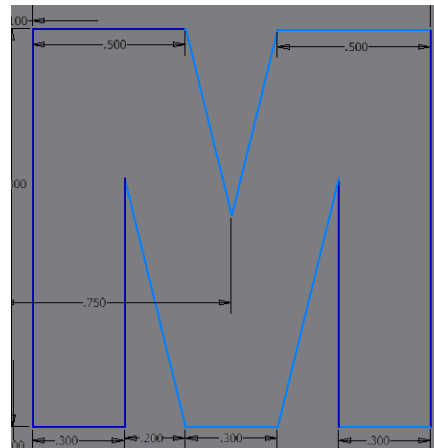
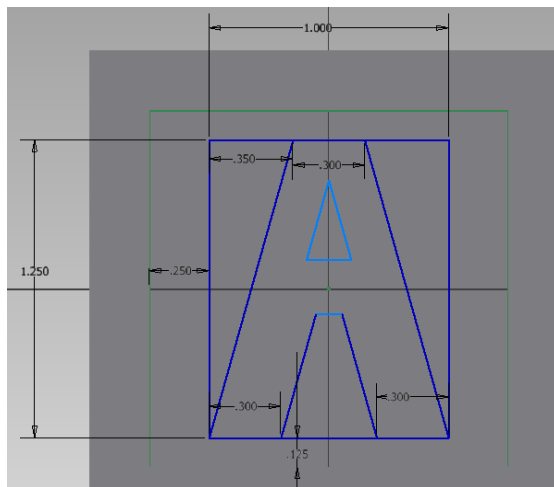


Letters should be planned mathematically

Most letters will fit in a 1.25" h x 1" w area

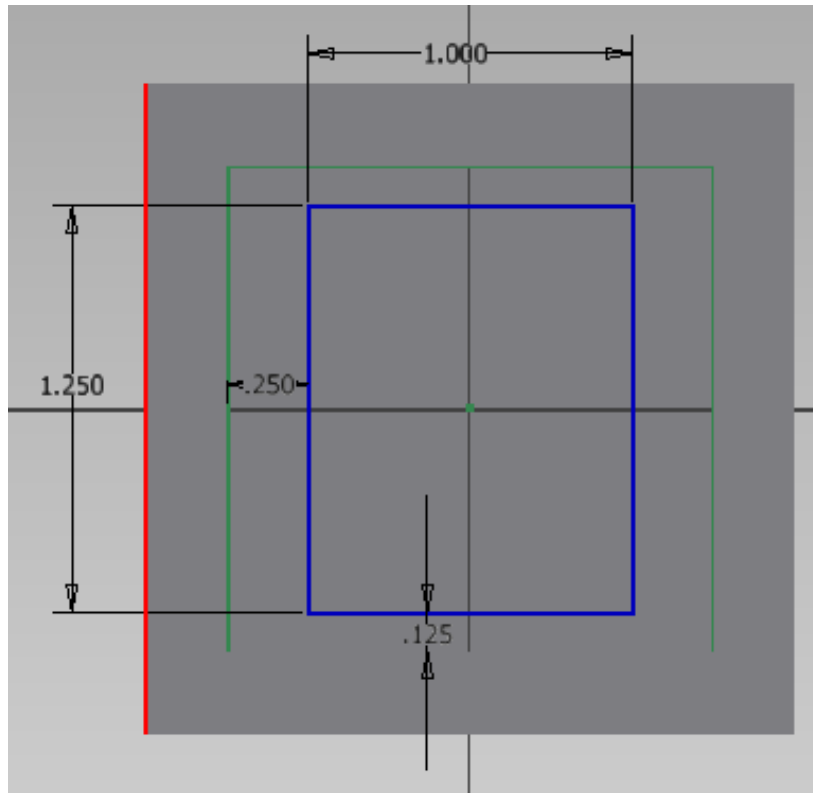
M & W are the exceptions 1.25" h x 1.25" w

If you follow the above guidelines letters can be centered easily.



You can use portions of the reference rectangle for your letter, then trim away the rest.

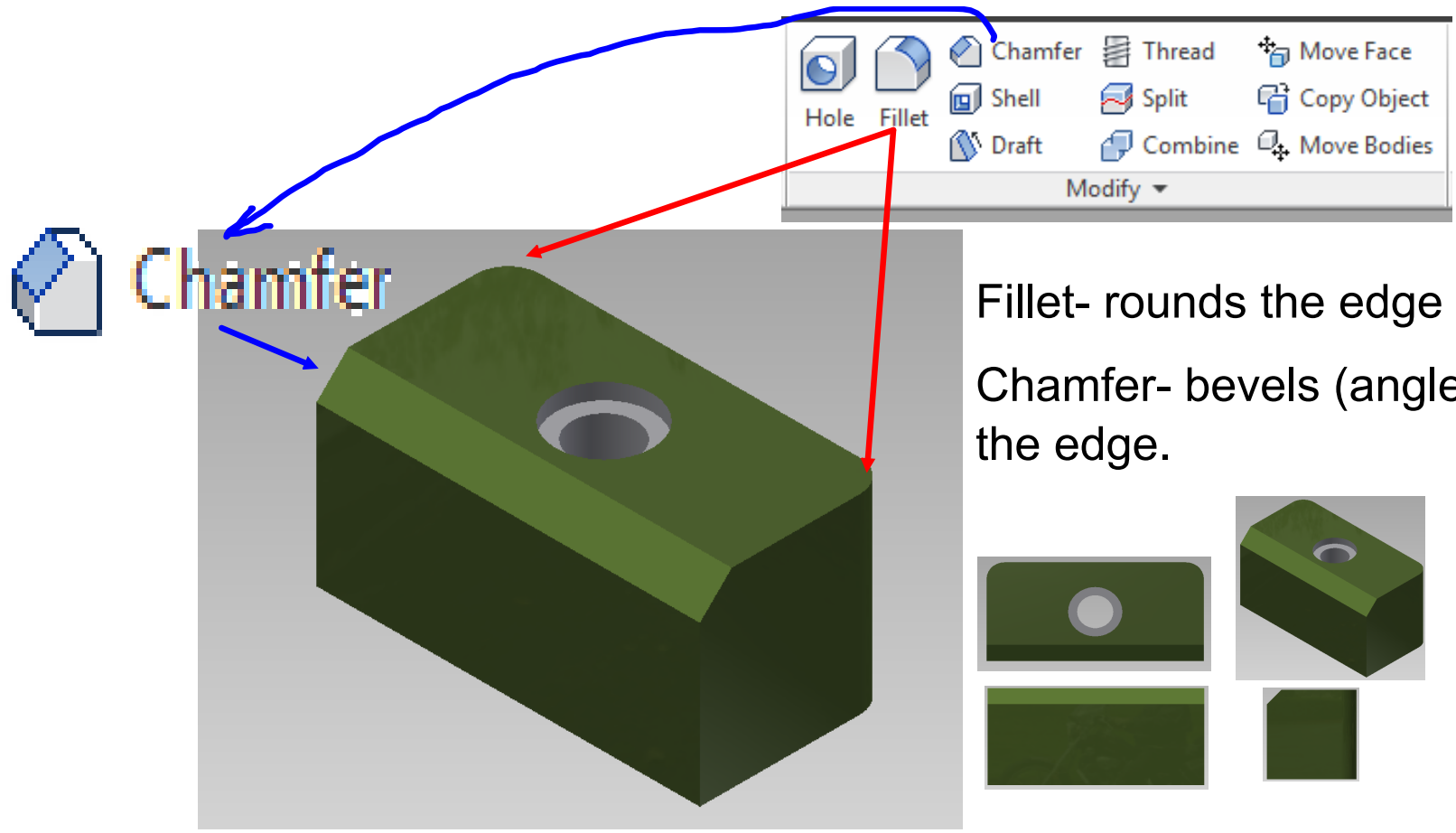




The blue rectangle is the reference area where your letter is placed.

Center the rectangle inside the frame and use it as a reference to place your letter.

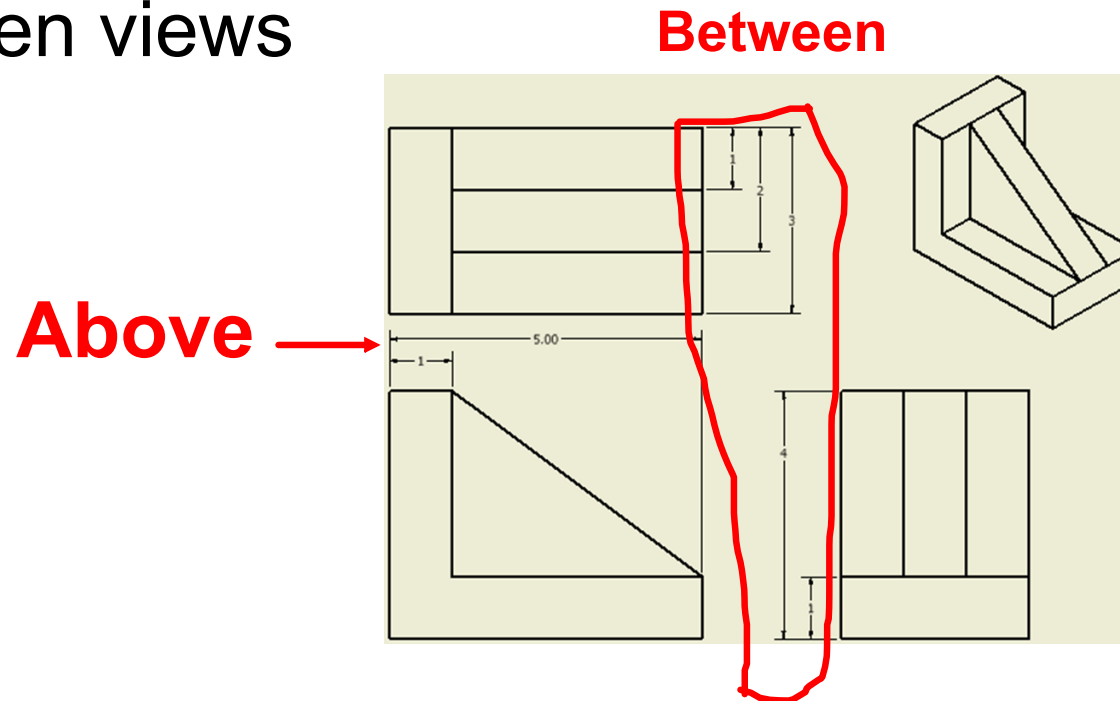
Remember the M & W are placed in a larger area.



Fillet- rounds the edge
Chamfer- bevels (angles)
the edge.

Drawing etiquette:

Dimensions should be placed above and between views



Rules for technical drawings and dimensioning are set by the American National Standards institute (ANSI).

Attachments

curved-lattice-shape.svg