

Do Now- Get a ruler, pencil, & a blank sheet of paper from front. Clear your desk except for notes and vocab sheet

Aim- Intro to Drafting

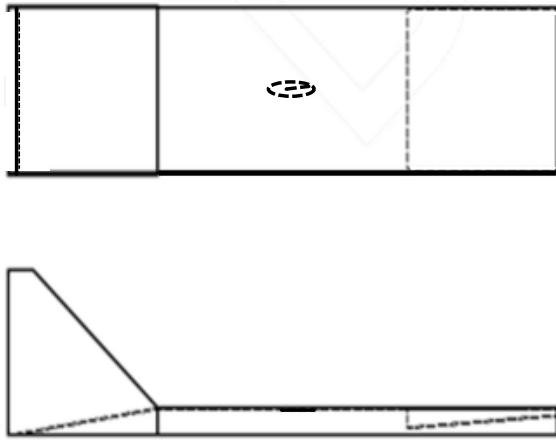
Notes-

Technical drawing is the practice or skill of drawing objects in a precise way using certain techniques of draftsmanship, as employed in architecture or engineering.

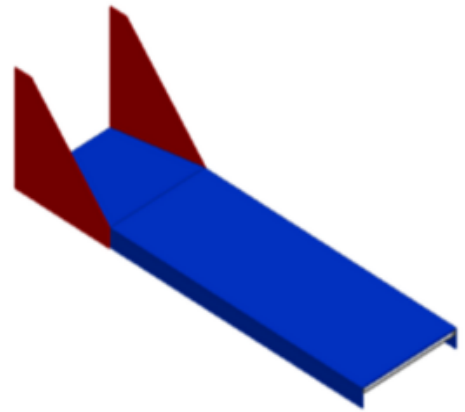
A **draftsperson** (drafter) is a person who makes a drawing (technical or expressive). A professional drafter who makes technical drawings is sometimes called a **drafting** technician.

Technical Drawing Project 5 drawings
* **Pencil & Eraser**

Assembled Orthographic Drawing of Air Racer



Assembled Isometric Drawing of Air Racer



Do Now- Get a ruler & grid paper from front. Have a sharpened pencil. Clear your desk except for notes and vocab sheet.

Aim- Orthographic & Scaling

Notes-

Orthographic drawing (projection) represents a three-dimensional object using several two-dimensional views of the object. Simple orthographic drawings are arranged positionally, meaning if the side is shown in the bottom left than the top view will be shown above it and the front view to the right. For 7th grade our orthographic plates will be top view upper left, front view bottom left, and side view bottom right.

Scaling (Scale Drawing) A scale of 1:1 implies that the drawing of the grasshopper is the same as the actual object. The scale 1:2 implies that the drawing is smaller, half the size than the actual object. In other words, the dimensions are multiplied by a scale factor of 0.5. Inversely a scale of 2:1 means you are increasing the size of the object being drawn.

***When drawing to scale the dimensions displayed are always listed as real size.**

Do Now

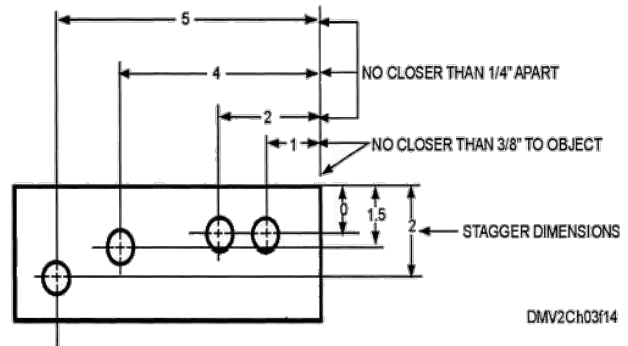
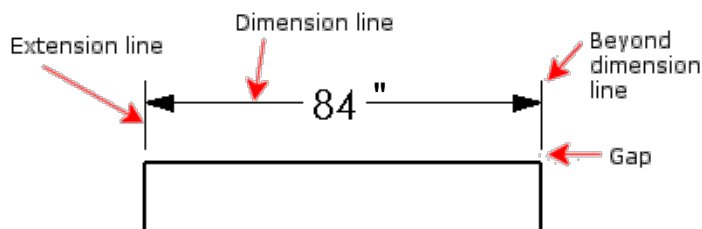
take out paper for notes and pencil, take out L-Block orthographic,
Clear desks, & Pick up Line reference sheet

Aim- Surface Identification and Ortho layout

How can you construct an orthographic from an Isometric drawing?

How do you know the size of an object?

The dimension line is a thin line, broken in the middle to allow the placement of the dimension value, with arrowheads at each end & extension lines to help identify the area, length, or surface being measured.



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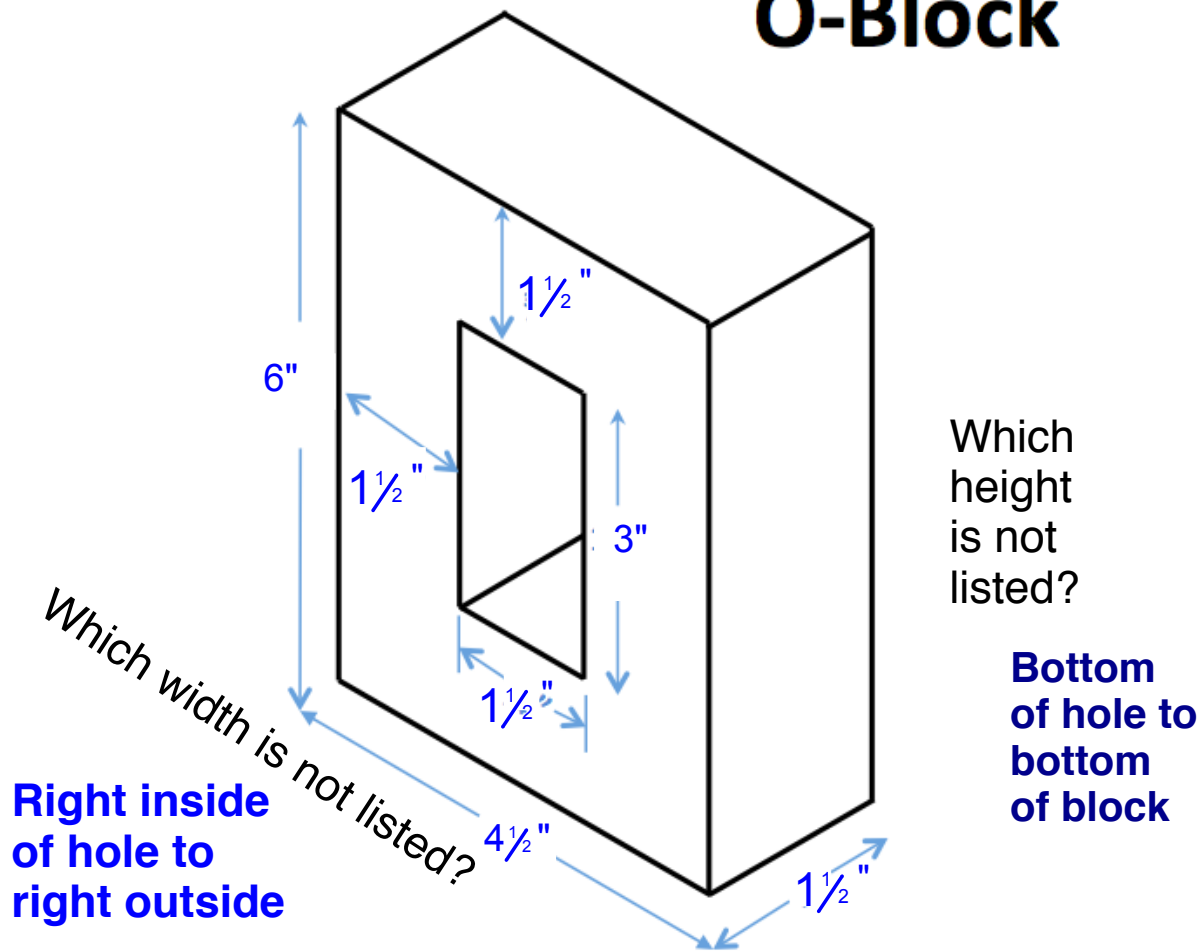
Do Now

take out paper for notes and pencil, take out L-Block orthographic,
Clear desks, & Pick up new drawing sheet

Notes • Object lines are visible but not thick/heavy
like border lines

- Construction lines are barely visible, easily erasable, and act as guidelines to position views in an orthographic plate (drawing).
- Hidden lines are dashed ----- they represent surfaces that exist under the surface of the current view.

O-Block

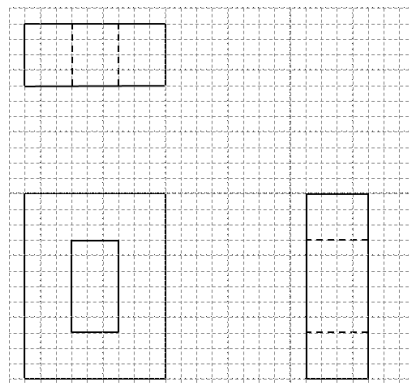
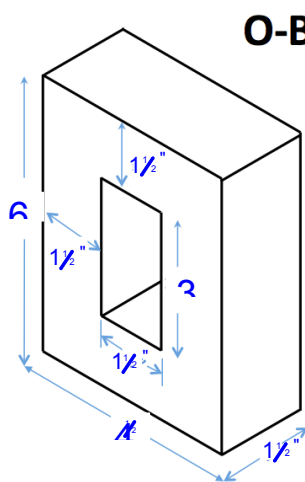


Do Now- Pencil, Ruler, Info sheets, & clear work area

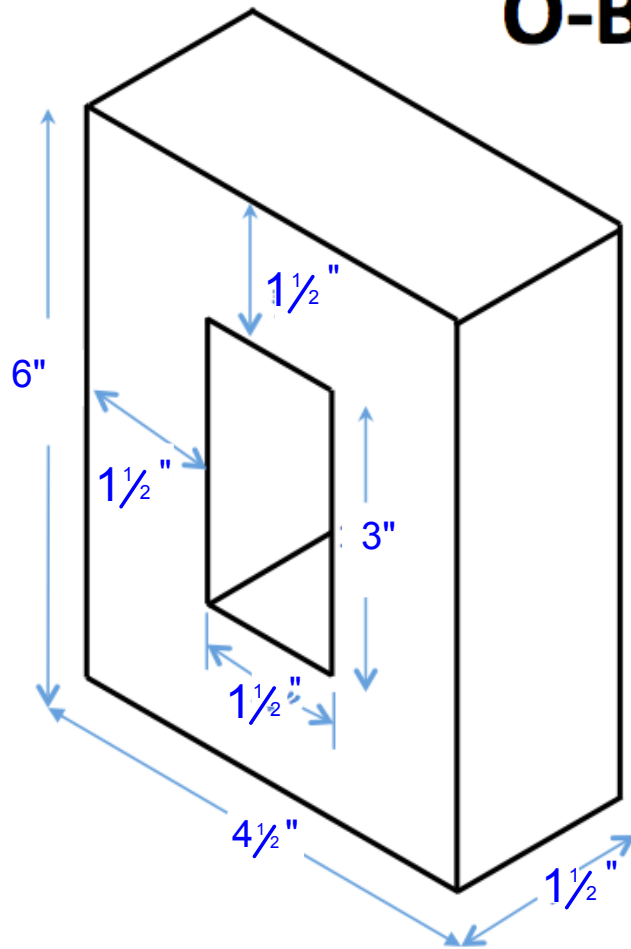
Aim- Scaled drawing with Hidden Lines.

Before creating a technical drawing what should you do?

How can you plan out your drawing?



O-Block

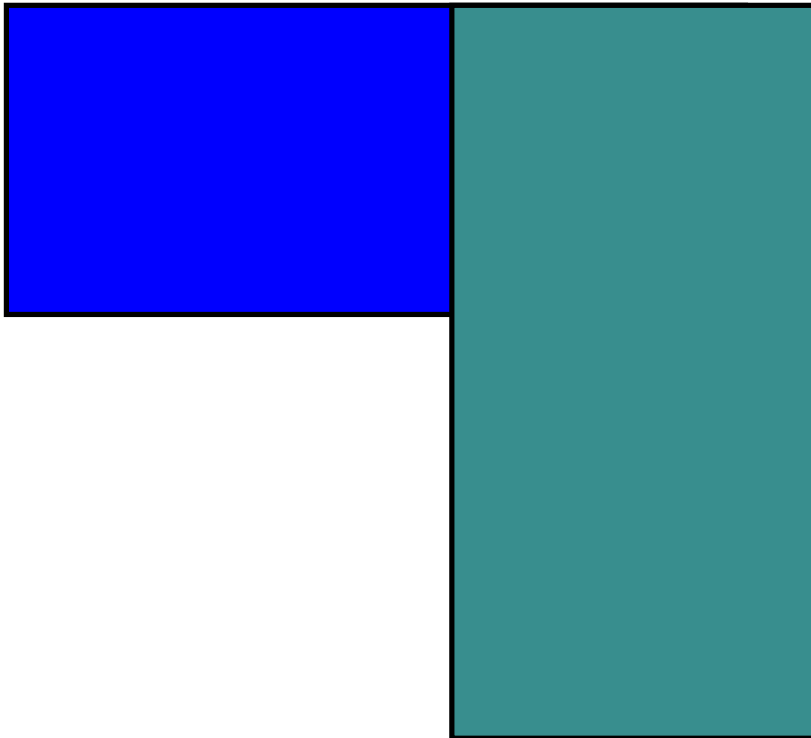
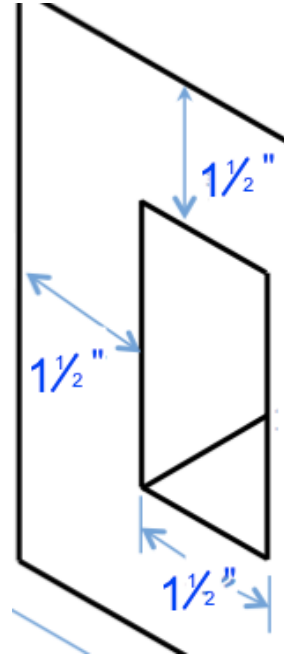
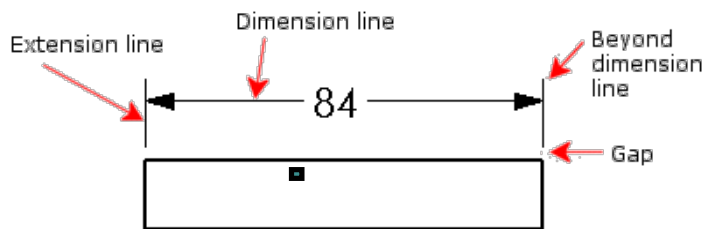


Do Now- Pencil, Ruler, Info sheets, & clear work area

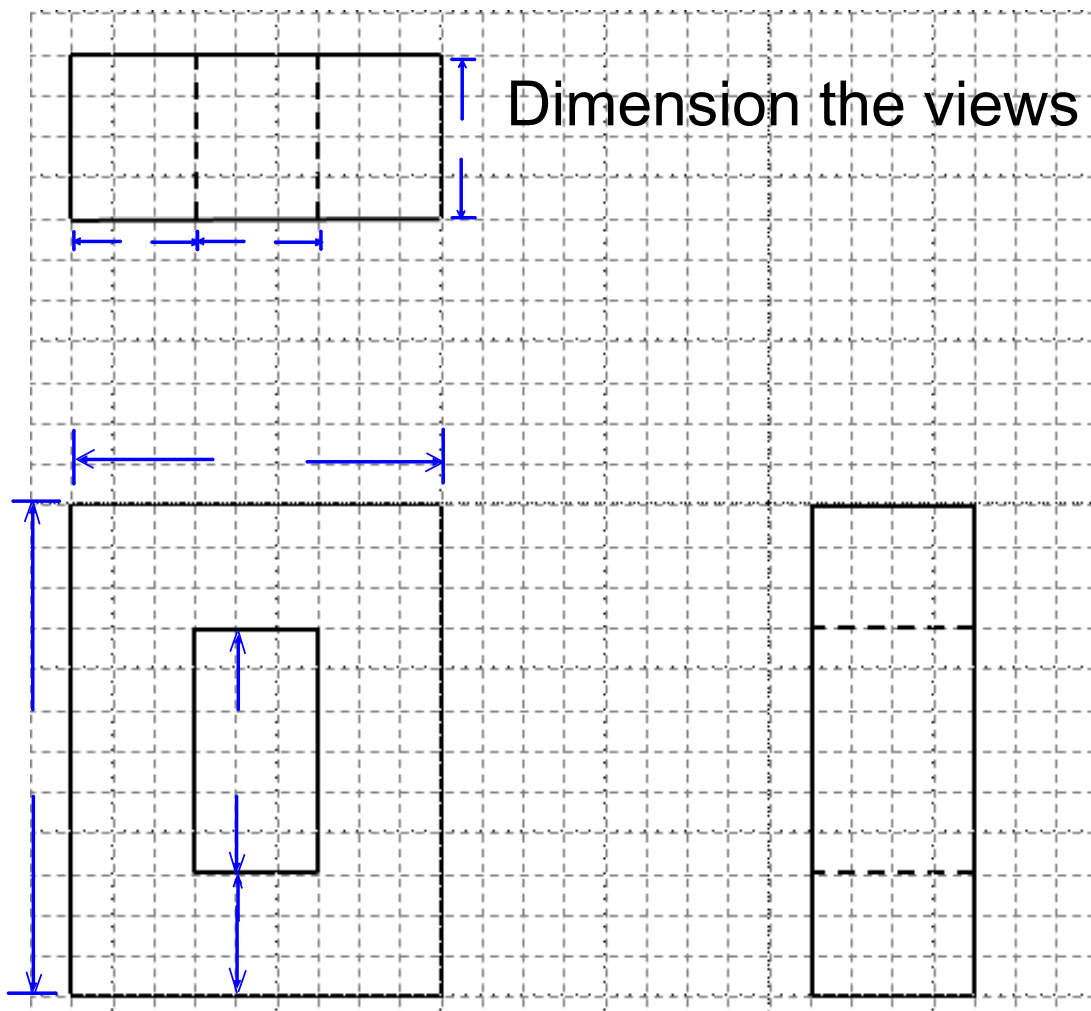
Aim- Dimensioning Correctly.

What are the parts to a dimension line?

Do you always use an extension line?



Dimension the views



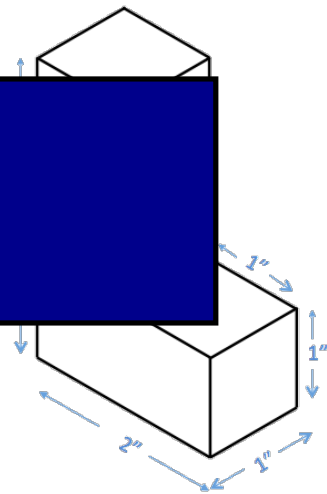
DN- Pencil, Ruler, Info sheets, Matching sheet 1 & clear work area.
Take Notes

Aim- Isometric

An Isometric Drawing is:

A pictorial representation of an object in

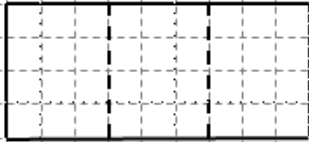
two dimensions in technical and engineering drawings.



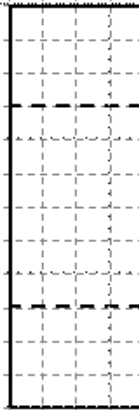
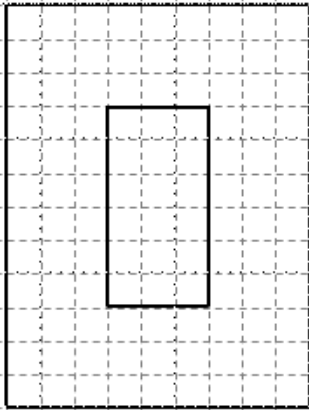
Pair up I will place you in quads

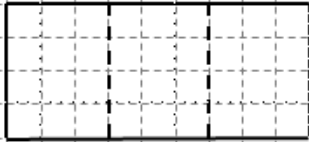
Everyone does 2 drawings, the group must complete all four drawings.

Remember- Sketching, Title, Scaling, Dimensions

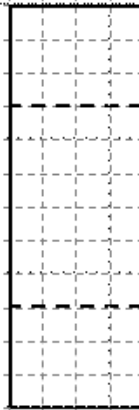
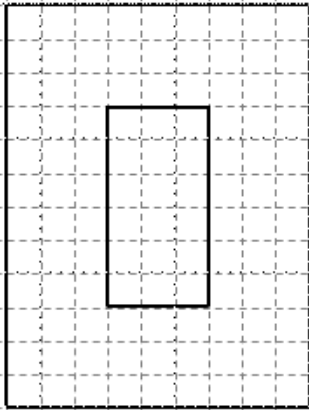


When you finish with
the O-Block drop it off
in folder up front.



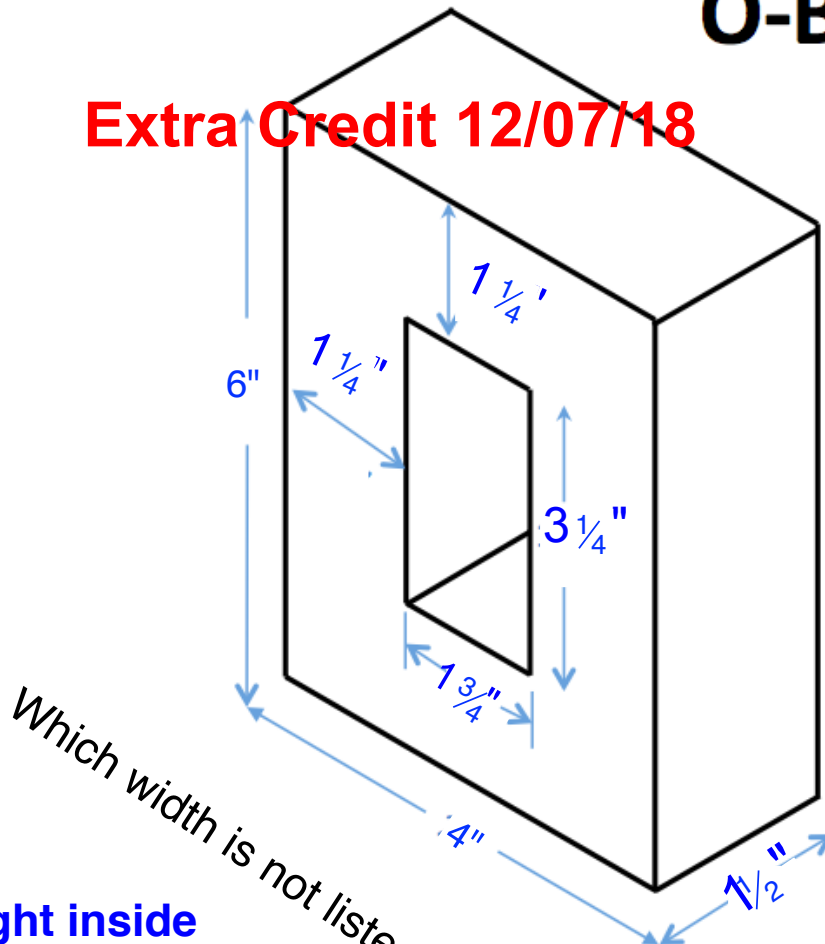


When you finish with
the O-Block drop it off
in folder up front.



O-Block

Extra Credit 12/07/18



Which height is not listed?

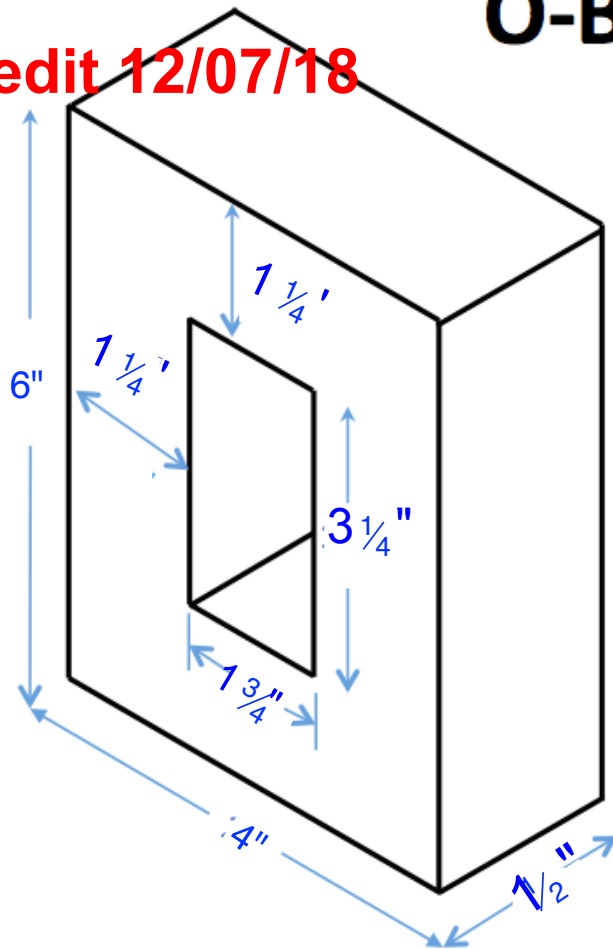
Bottom of hole to bottom of block

Right inside of hole to right outside

Which width is not listed?

Extra Credit 12/07/18

O-Block



DN- Pencil, Ruler, Info sheets, Matching sheet 1 & clear work area.
Take Notes

Aim- Isometric to orthographic

1) Sketch it, 2) Title it, 3)Scaling?, 4) Dimension it

Sketching is important so you don't make mistakes. Sketch the orthographic before you attempted the drawing.

One drawing done by 12/20

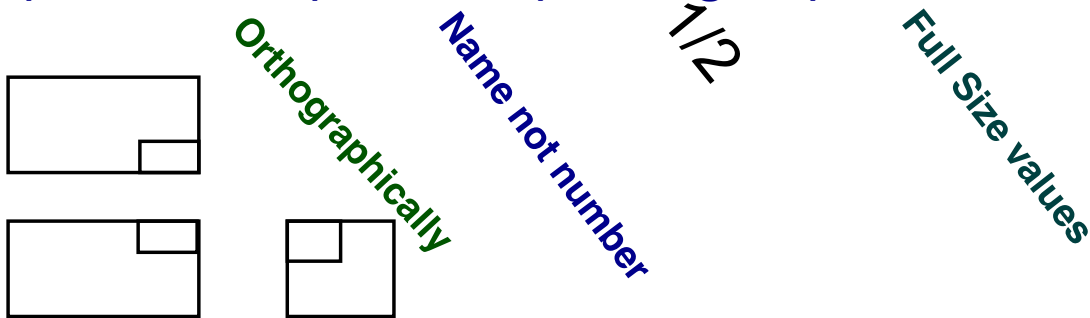


DN- Arrange your desks in group sets. Pencil, Ruler, Info sheets, & clear work area.

Aim- Isometric to Orthographic

One drawing done by 12/20

1) Sketch it, 2) Title it, 3) Scaling?, 4) Dimension it



Everyone does 2 drawings, the group must complete all four drawings.

DN- Pencil, Ruler, Info sheets, Pick up & clear work area.

Aim- Basic Drawing wrap up

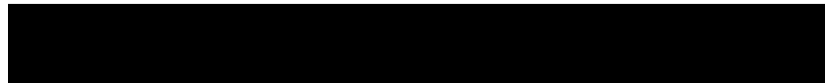
Remember:

1) Sketch it 2) Title it 3)Scaling? 4) Dimension it

Sketching is important so you don't make mistakes. Sketch the orthographic before you attempted the drawing.

Second drawing done by 1/07

Everyone does 2 drawings, the group must complete all four drawings.

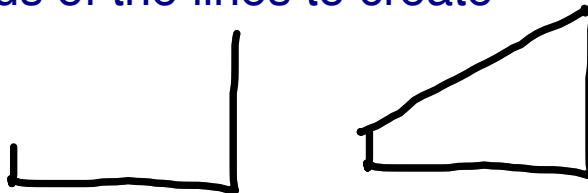


DN- Pencil, Ruler, Info sheets, Pick up Drawing Rubric & clear work area.

Aim- Drawing Slopes

Remember:

Mechanical / Technical Drawing is about connecting lines. Take this approach when drawing blocks 42-46. Draw the lines you know are horizontal or vertical then connect the ends of the lines to create the sloped line



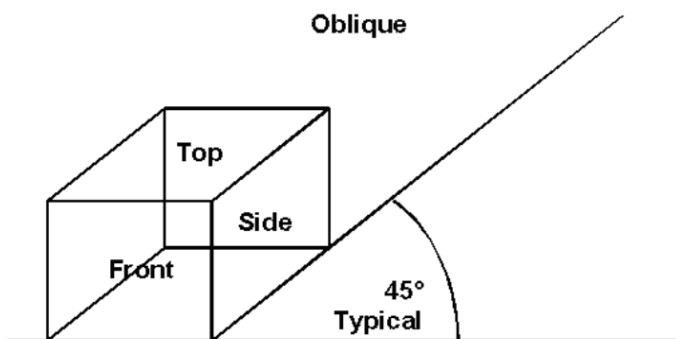
Second drawing due today



DN- Pencil, Ruler, Info sheets & clear work area. Record Notes**Aim- Three Dimensional Representation**

What is an oblique?

An **Oblique** projection is a simple way to create a three dimensional representation of an object. When you draw an object **Oblique** you choose one view and draw the two adjacent views projected up and back at 45 degrees.



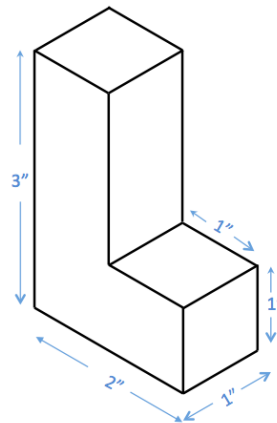
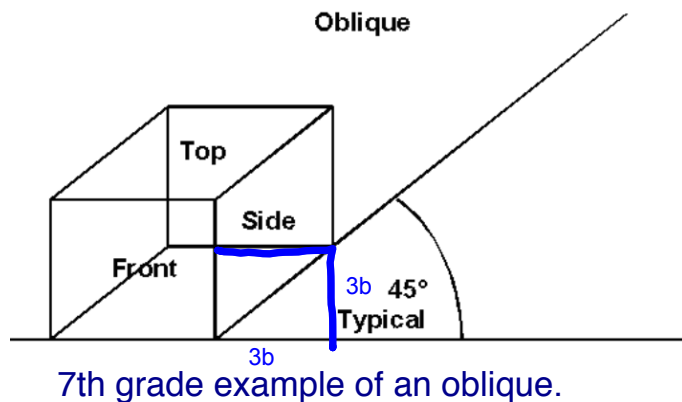
For 7th grade the example shown is an example of an oblique. When you finish your 3rd drawing attempt a technical sketch of one of the blocks you have drawn.



DN- Pencil, Ruler, Info sheets, Pick up Drawing plate & clear work area. Draw it Set up a drawing Plate Title L-Block Oblique

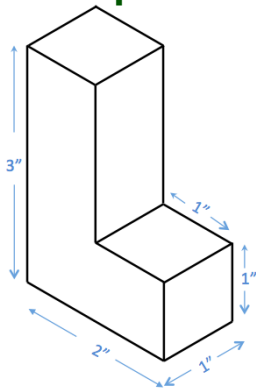
Aim- Three Dimensional Representation

How to draw an oblique.



DN- Pencil, Ruler, Info sheets, Pick up Block 36- Grooved Block
Isometric plate & 30°/60° Triangle clear work area.

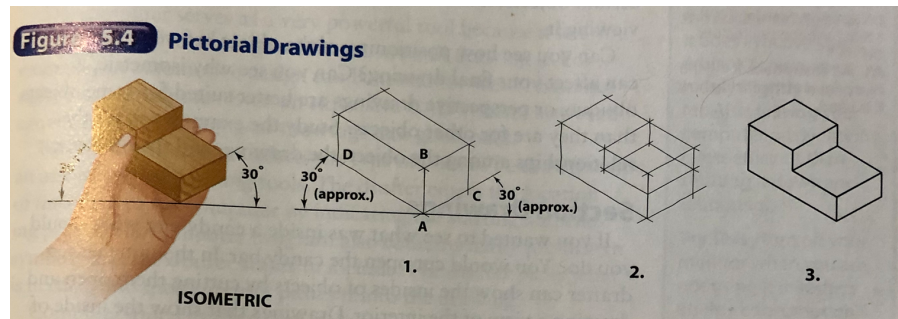
01/15/19



An Isometric Drawing is:

Isometric projection is a method for visually representing three-dimensional objects in two dimensions in technical and engineering drawings. The three views of the object are drawn on a 30° plane.

In an **isometric drawing**, the object drawn is rotated at a 30° angle so 3 adjacent views can be shown. An isometric drawing is the only pictorial drawing that accurately portrays the dimensions of the 3 views.



DN- Pencil, Ruler, Info sheets, Set Up Isometric Plate & clear work area.

Aim- Drawing work

- 2 Basic Drawings 35-41
- Drawing 46 3/4 Scale or 43 and another slope block 42-45
- 1 Block from the box

Due by 1/23/19



DN- Pencil, Ruler, Info sheets, & clear work area. Please wait patiently for information.

Aim- Finish Drawing Work

- 2 Basic Drawings 35-41
- Drawing 46 3/4 Scale or 43 and another slope block 42-45

Due by 1/23/19

- **This work can be done at home, using PolleyTechnical.com**

Bonus- 1 Block from the box



DN- Pencil, Ruler, Info sheets, Set Up Isometric Plate & clear work area.

Aim- Drawing work

- 2 Basic Drawings 35-41
- Drawing 46 3/4 Scale or 43 and another slope block 42-45
- Oblique & Isometric worth 20 a piece

Due by 1/24/19



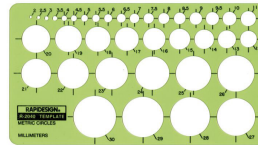
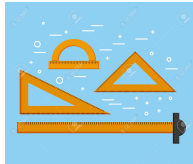
DN- Pencil, Ruler, Info sheets, clear work area & take Notes.

Aim- Drawing wrap up

Drawing Test 1/31 & 2/1

Notes-

Technical Drawing tools- Drawing board, T-square, Triangles; 45° 45° 90° & 30° 60° 90°, Templates, Compass, & Pencil



Serif

Template- a piece of plastic with patterns that make repeating a design or shape easier.

-
- 2 Basic Drawings 35-41
 - Drawing 46 3/4 Scale or 43 and another slope block 42-45
 - Oblique & Isometric worth 20 a piece

Due by 1/24/19

Bonus Block - Your Initial 7" x 7" x .5"

