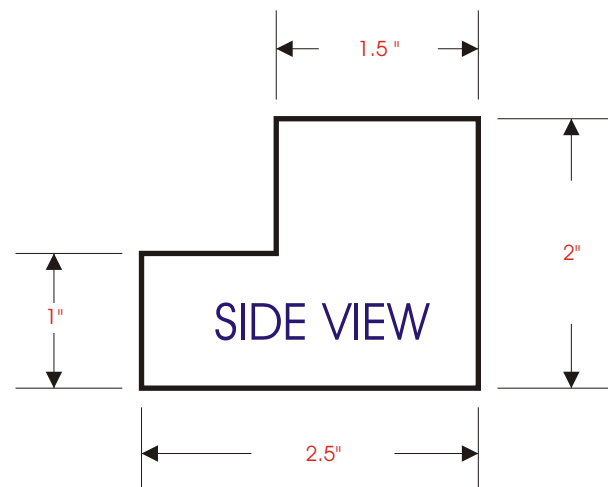
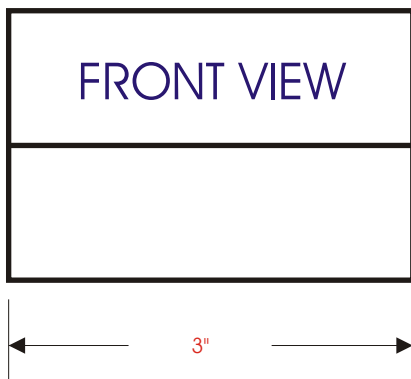
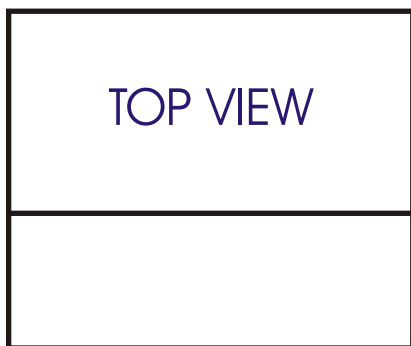
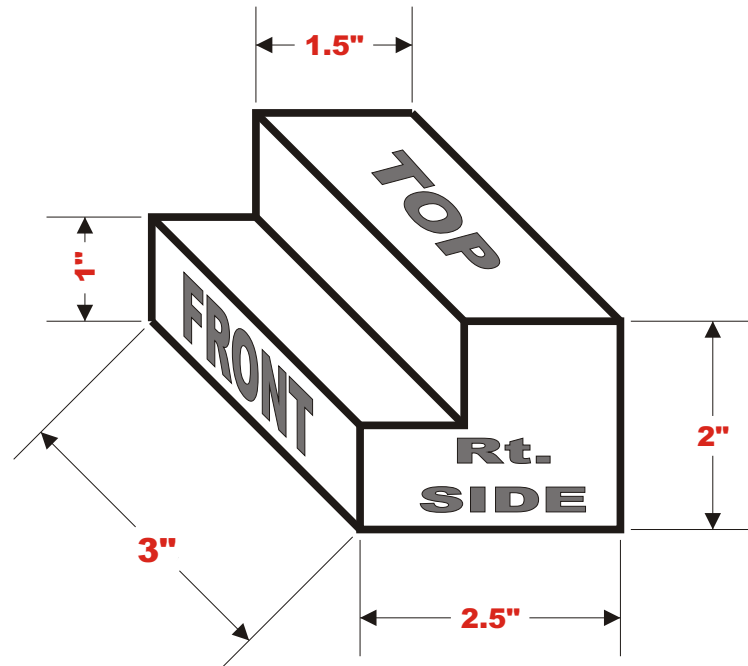


3 -View Drawings

3 - View drawings (Working Drawings) are an important part of the engineering process. As a rule, they show an object from three different views (Usually the Front, Top, & Right Side). Each of the views are drawn in 2-D (two dimensional) , and have dimensions labeling the length, width, and height of the object. A 3-view drawing should also include an isometric (3-D) drawing, to serve as a visual aid. We never include dimensions on the Isometric view. If you follow the following steps to complete a 3-view drawing, you shouldn't have any trouble, drawing any shape.

Follow these steps for each shape.

1. Front View
2. Top View
3. Right Side View
4. Dimensions
5. Isometric View



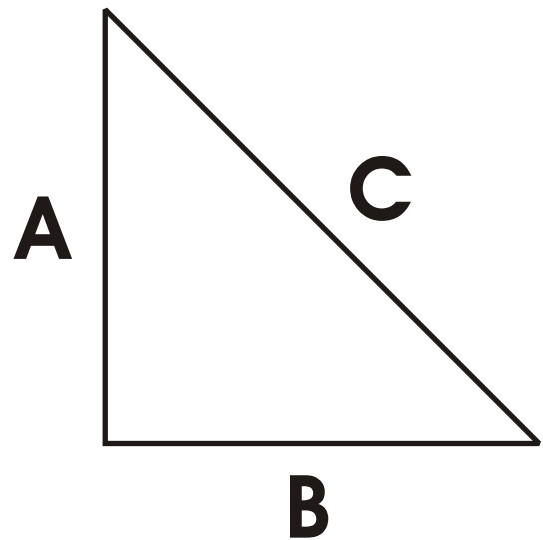
Blocks = Inches

1	
2	
3	
4	
6	
8	
10	
12	

Object Lines _____

Hidden Lines - - - - -

Pythagorean theorem: $A^2 + B^2 = C^2$



DIMENSIONS

Leaders

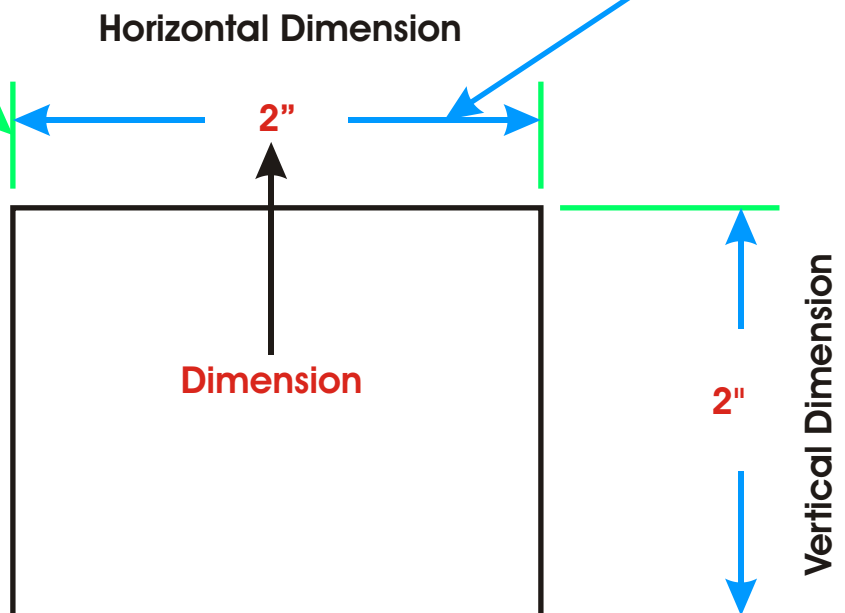
Arrows

All Dimensions have 3 parts:

2 Leaders (or brackets)

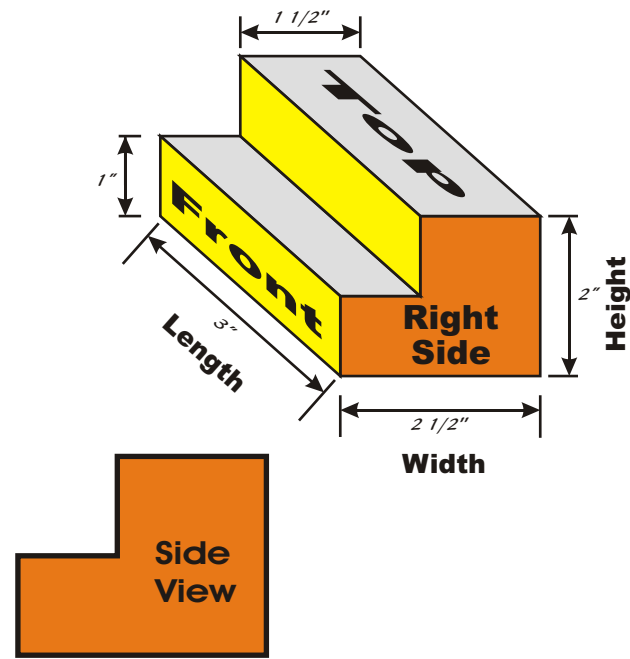
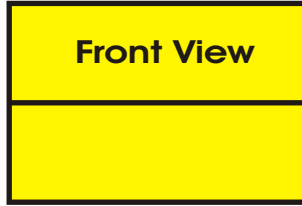
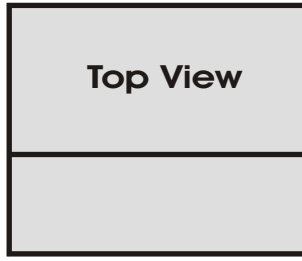
2 Arrows

The dimension with the units
(inches, feet, mm)

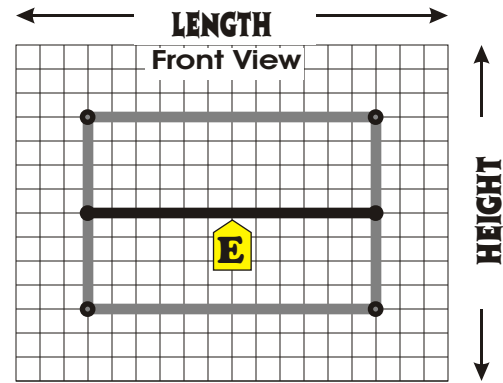
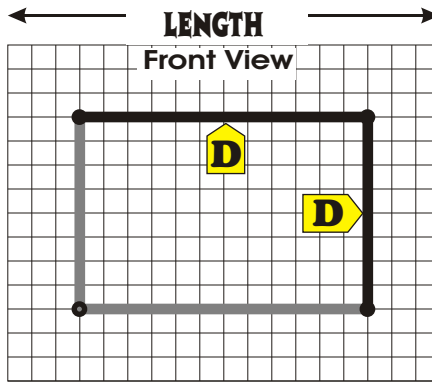
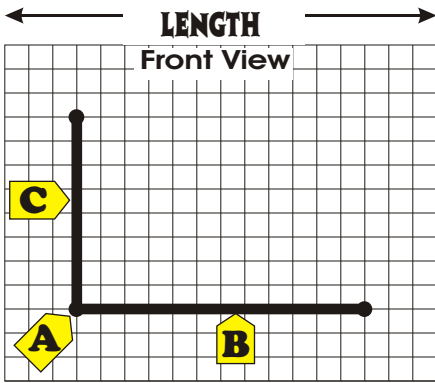


3-VIEW DRAWINGS

1. Front View
2. Top View
3. Right Side View
4. Dimensions
5. Isometric View

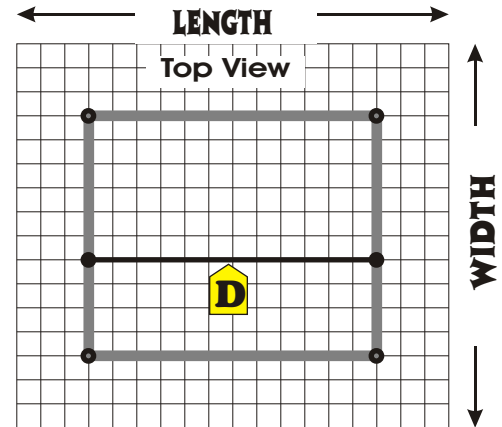
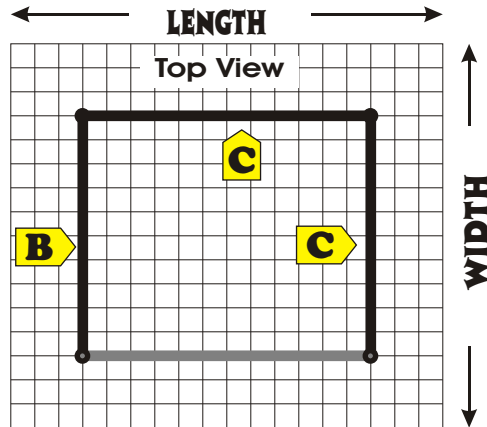
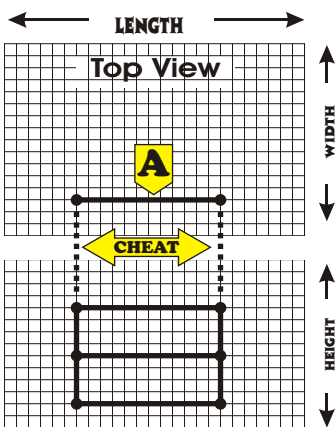


STEP 1



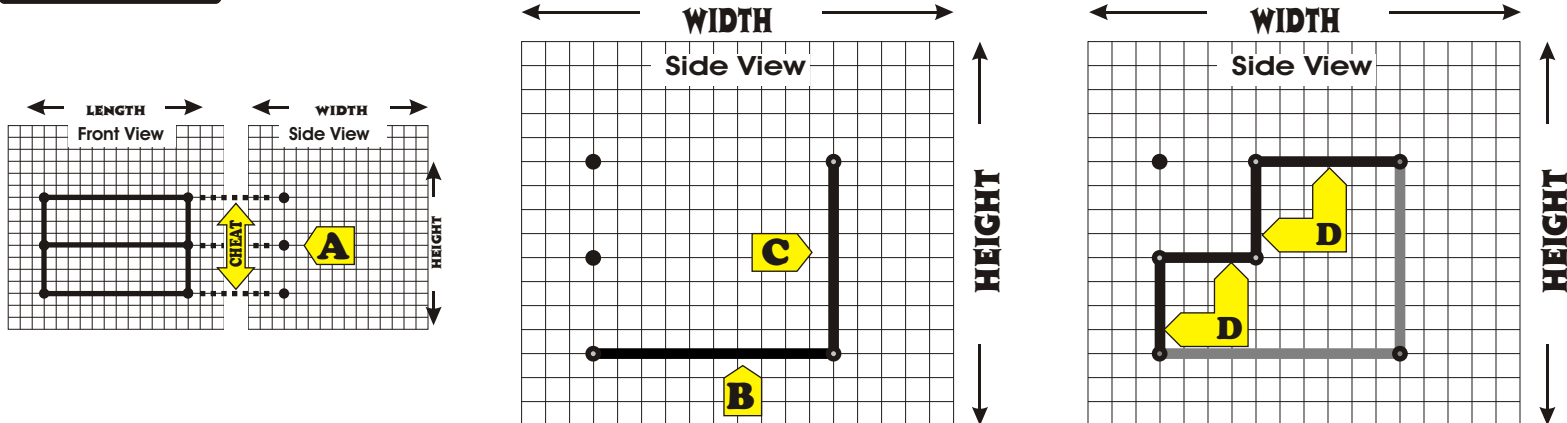
- A - Place a point of origin 3 blocks over and 3 blocks up
- B - Draw in the object line representing the overall length (3 inches or 12 blocks)
- C - Draw in the object line representing the overall height (2 inches or 8 blocks)
- D - Finish drawing the object lines that represent the outside edges of the shape
- E - Measure and draw any other object lines that represent more surfaces

STEP 2



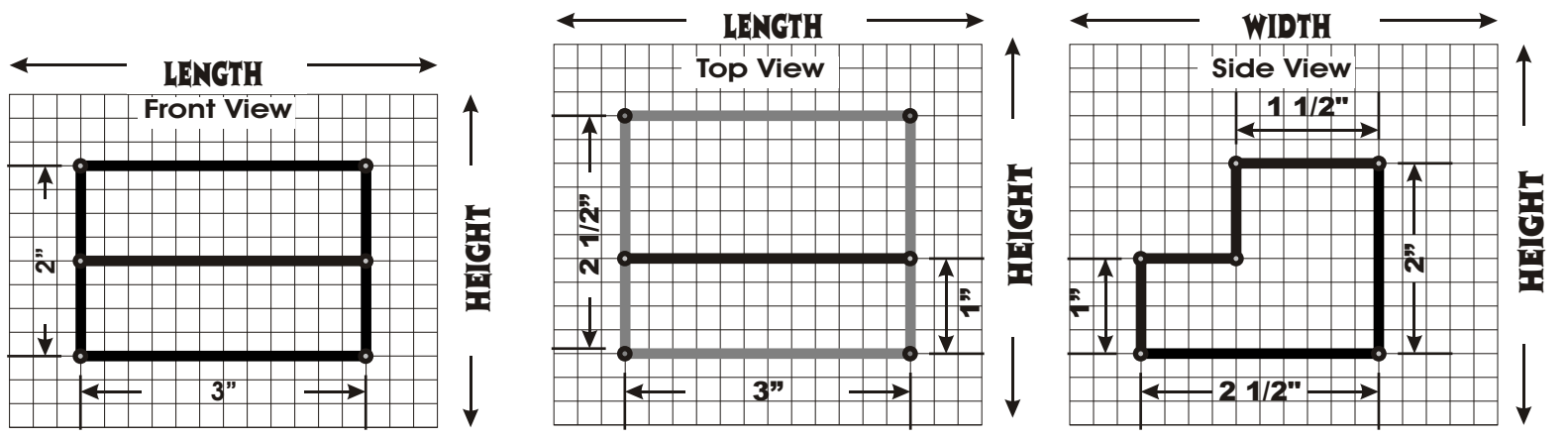
- A - CHEAT Transfer the length of the shape to the top view by drawing dotted lines
- B - Draw in the object line representing the overall width (2 1/2 inches or 10 blocks)
- C - Finish drawing the object lines that represent the outside edges of the shape
- D - Measure and draw any other object lines that represent more surfaces

STEP 3



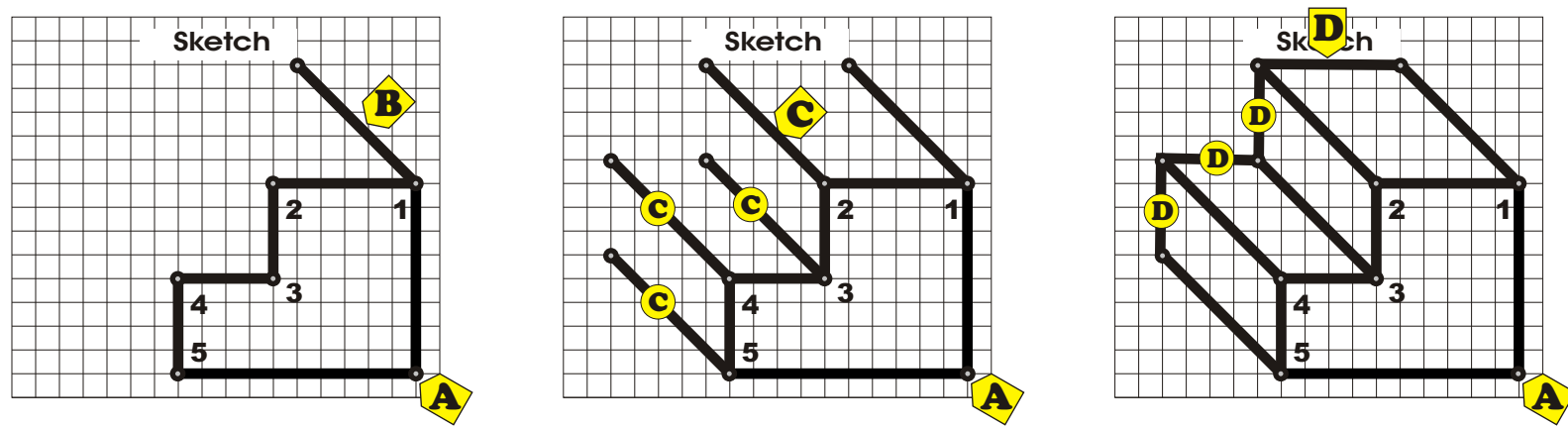
- A- *CHEAT* Transfer the height of the shape to the side view by drawing dotted lines
- B - Draw in the object line representing the overall width (2 1/2 inches or 10 blocks)
- C - Draw in the object line representing the overall height (2 inches or 8 blocks, you also have a dot that represents the height)
- D- Finish drawing the object lines that represent the outside edges of the shape

STEP 4



- A - Dimension the overall length (either the front or top view)
- B - Dimension the overall height (either the front or side view)
- C - Dimension the overall width (either the top or side view)
- D - Dimension any other edges, cut-outs, slants, holes, etc. (don't over dimension, it only makes the drawing look messy)

STEP 5



- A- Draw the side view of the shape in the bottom right corner of the sketch box (over one up one)
- B - Starting at point #1, draw a diagonal line up to the left 5 intersections. (take your time and hit each diagonal intersection)
- C - Repeat step B for points 2, 3, 4, and 5.
- D - Now simply connect all 5 dots and your isometric view will be complete.