

3 View Drawing Design

Getting Started:



1. Turn on computer.
2. Click on the Sketchup icon
3. Click on Sketchup/Preference command in Window.
4. Click on the word Template and select no Template.
5. Take a big sigh of relief that you have made it this far.
6. Click on File/New command in File
7. Click on View/ Tool Palettes/Large Tool Set in the menu bar to get larger selection of tools on screen.
8. Click on Windows/ Model Info command in the menu bar.
9. Select the Units option on the left and change the precision setting to 1/16" and un check the enable length snapping box.

Length Units

Format: Architectural Inches




Precision: 1/16"

Enable length snapping: 1/16"

10. Click on the RED X in the top right corner of the Model Info Window to close it.
11. Click on the Camera/Parallel Projection command in the menu bar.

3 View Drawing Basics:

Top View -

1. Click on the rectangle tool  and draw a rectangle on the screen and before clicking anything else type in the dimension 5", 2" in the dimension setting location in the lower right corner and press enter.
2. Click on the zoom Extents tool  to enlarge the image on the screen.
3. Click on the zoom tool  and pull out on the mouse to scale model to fit better on the screen.

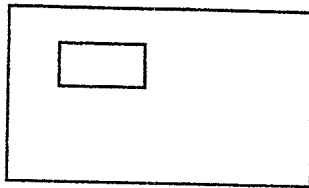



Fig. 1

Front View -

1. Click on the line tool  to select it.
2. Click on the lower left corner of the top view and draw a 1" vertical line down.
3. Click on the rectangle tool to select it.
4. Click on the edge of the 1" vertical line to set the start point and draw a 5" x 2" rectangle (View the dimensions box to draw to exact size.)

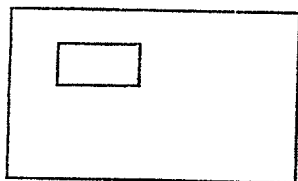


Fig. 2

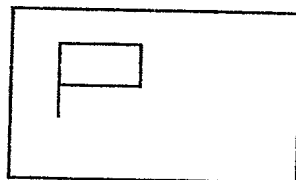


Fig. 3

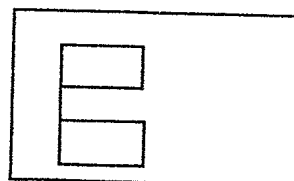
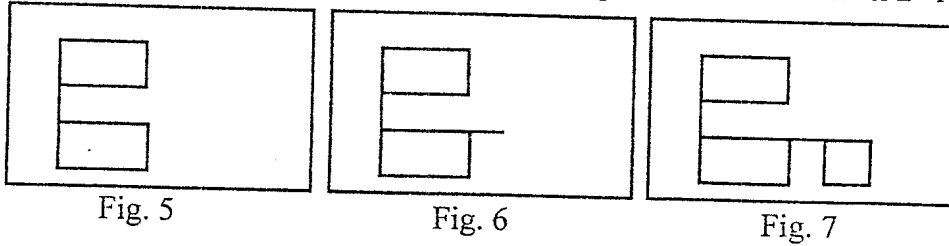


Fig. 4

Side View:

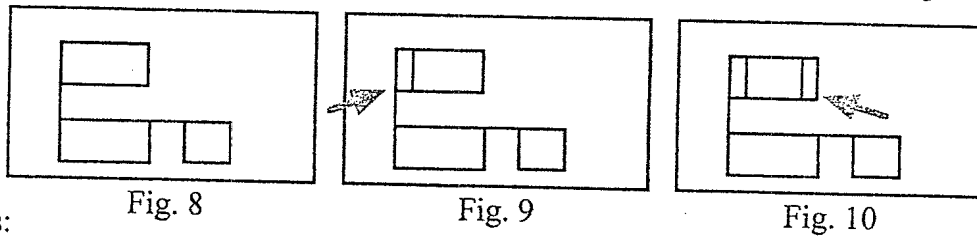
1. Click on the line tool to select it.
2. Click on the top right corner of the side view and draw a 1" horizontal line to the right.
3. Click on the rectangle tool to select it.
4. Click on the edge of the 1" horizontal line to set the start point and draw a 2" x 2" rectangle



Complete The Details in Each View:

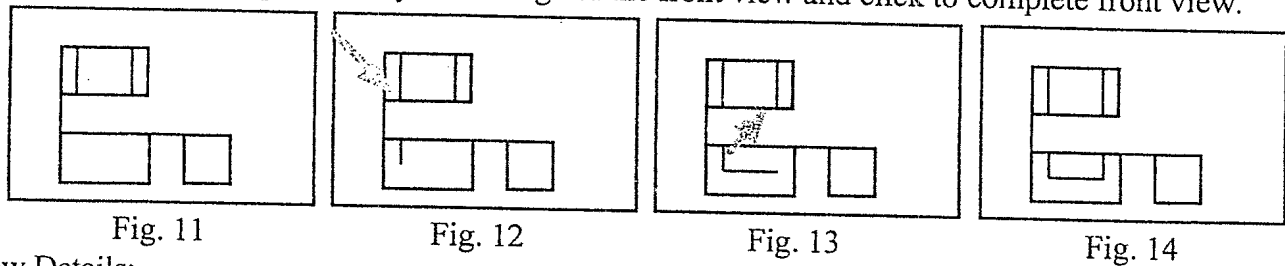
Top View Details:

1. Click on the top view lower left corner and move over 1" to the right on the horizontal line and click to set location. (see fig. 9)
2. Click on the 1" location point and draw a vertical line up 2" to the top edge using the line tool.
3. Click on the top view lower right corner and move over 1" to the left on the horizontal line and click to set location. (see fig. 10)
4. Click on the 1" location point and draw a vertical line up 2" to the top edge using the line tool.



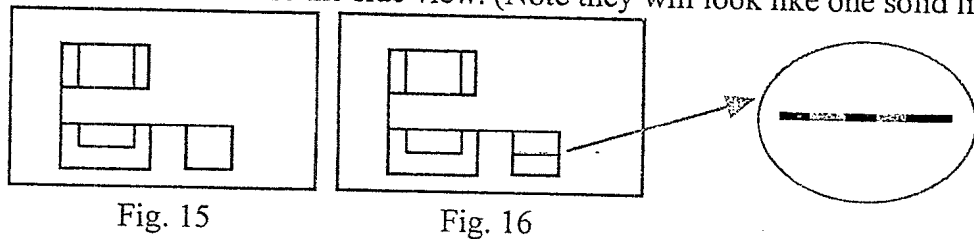
Front View Details:

1. Move the line tool to the left 1" line in the top view to set location.
2. Follow the line tool down on the green guide line to the top of the front view edge. Click and draw a vertical line 3/4" down and click to set location. (see fig. 12)
3. Move the line tool up to the right 1" line in the top view to set location. Then follow the line tool down on the green guide line, when the horizontal line is red click on the screen to draw line. (see fig. 13)
4. Move the line tool up vertically to the edge of the front view and click to complete front view.



Side View Details:

1. Move the line tool to the lower right 3/4" line in the front view to set location.
2. Follow the line tool over on the red guide line to the edge of the side view. Click to set location.
3. Draw a series of short horizontal lines across the side view. (Note they will look like one solid line.)



Erasing unwanted construction lines:

1. Click on select tool.
2. Click on each of the 1" spacer lines and press the delete key when they are selected. (turn yellow)
3. Click on every other small dash lines in the side view and press the delete key when they are selected to show a hidden line.
4. Click on the top line in the front view and press the delete key when it is selected.

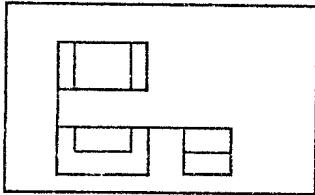


Fig. 17

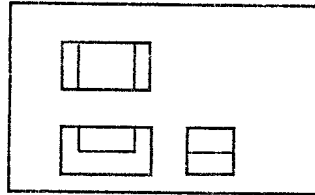


Fig. 18

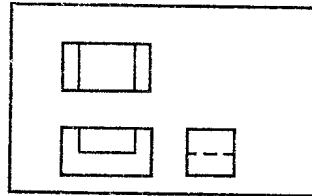


Fig. 19

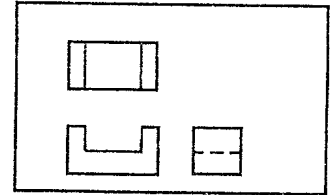

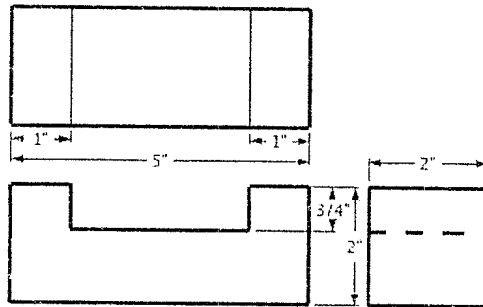




Fig. 20

Dimensioning the object:

1. Click on the dimension tool to select it. 
2. Click on two points and then move the cursor down or over to set a dimension for that part of the object. Use the guide lines to assist in lining up the different dimensions.
3. Dimension all the necessary parts of the object



Identifying Your Drawing:

1. Click on the Text tool to select it. 
2. Type in the following information.
3. Click on the move tool and place the text near the lower left corner of the front view. 

Practice Drawing
Student Name, Period

Save the drawing:

1. Click on File SaveAs in the menu bar.
2. Type in your name and Practice drawing.
3. Save in the Student folder.

Printing your drawing

1. Click on the File/ Page Setup command and select the landscape format.
2. Click on the File/ Print command in the menu bar.

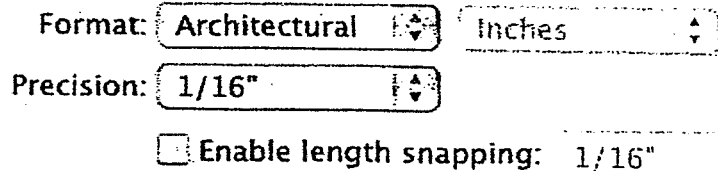


Getting Started:








1. Turn on computer.
2. Click on the Sketchup icon
3. Click on Sketchup/Preference command in Window.
4. Click on the word Template and select no Template.
5. Take a big sigh of relief that you have made it this far.
6. Click on File/New command in File
7. Click on View/ Tool Palettes/Large Tool Set in the menu bar to get larger selection of tools on screen.
8. Click on Windows/ Model Info command in the menu bar.
9. Select the Units option on the left and change the precision setting to 1/16" and un check the enable length snapping box.

Length Units



10. Click on the RED X in the top right corner of the Model Info Window to close it.
11. Click on the Camera/Parallel Projection command in the menu bar.

Isometric View Drawing Basics:

1. Click on the rectangle tool  and draw a rectangle on the screen. and before clicking anything else type in the dimension 5", 2" in the dimension setting location in the lower right corner and press enter.
2. Click on the zoom Extents tool  to enlarge the image on the screen.
3. Click on the zoom tool  and pull out on the mouse to scale model to fit better on the screen.
4. Click on the orbit tool  to rotate image up. and create a 3D image on the screen.
5. Click on the Push/Pull tool  and then the top of the image and pull up to 2"

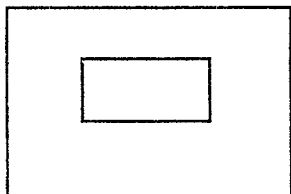


Fig. 1

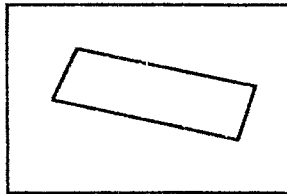


Fig. 2

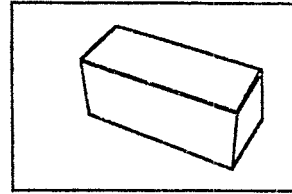



Fig. 3

Complete The Details in Each View:

Top View Details:

1. Click on the line tool to select it. 
2. Click on the top view lower left corner and move over 1" to the right on the 30 degree line and click to set location. (see fig. 4)
3. Click on the 1" location point and draw a 30 degree line up 2" to the top edge following the green guide line and using the line tool. (see fig. 5)
4. Click on the top view lower right corner and move over 1" to the left on the 30 degree line and click to set location. (see fig. 6)
5. Click on the 1" location point and draw a 30 degree line up 2" to the top edge following the green guide line using the line tool.

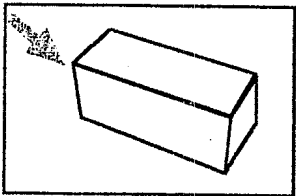


Fig. 4

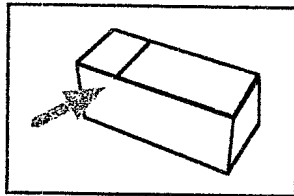


Fig. 5

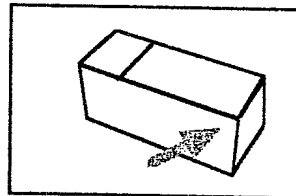


Fig. 6

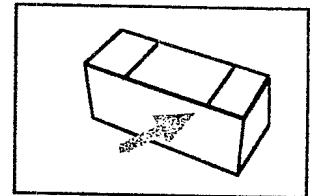


Fig. 7

Front View Details:

1. Click on the Push/Pull tool to select it.
2. Click on the top of the image and push down 3/4"

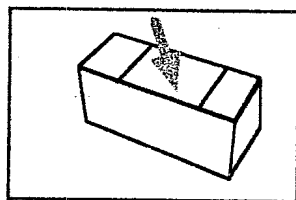


Fig. 8

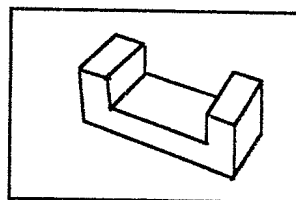

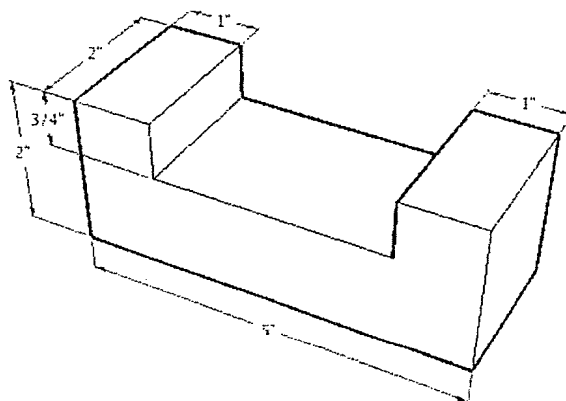


Fig. 9

Dimensioning the object:

1. Click on the dimension tool to select it. 
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2. Click on the File/ Print command in the menu bar.



Propeller Car Design

Getting Started:



1. Turn on computer.
2. Click on the Sketchup icon
3. Click on Sketchup/Preference command in: Window.
4. Click on the word Template and select no Template.
Top tool bar should include the following icons.



If not click on the View/ Custom Tools in the menu bar and drag the icons up to the top tool bar and click on the done button.

6. Click on File/New command in File
7. Click on View/ Tool Palettes/Large Tool Set in the menu bar to get larger selection of tools on screen.
8. Click on Windows/ Model Info command in the menu bar.
9. Select the Units option on the left and change the precision setting to 1/16" and un check the enable length snapping box.

Length Units

Format: Architectural Inches

Precision: 1/16"

Enable length snapping: 1/16"

10. Click on the RED X in the top right corner of the Model Info Window to close it.
11. Click on the Camera/Parallel Projection command in the menu bar.

Drawing a Basic Propeller Car

1. Click on the rectangle tool and draw a rectangle on the screen. Before clicking anything else type in the dimension 12", 1 1/2" in the dimension setting location in the lower right corner and press enter.
2. Click on the zoom Extents tool to enlarge the image on the screen.
3. Click on the zoom tool and pull out on the mouse to scale model to fit better on the screen.
4. Click on the orbit tool to rotate image up. and create a 3D image on the screen.
5. Click on the Push/Pull tool then the top of the image and pull up to " 2 "
6. Click on the front icon to rotate object view the front of the image.
7. Click on the left icon to rotate object view to the left side of image.
8. Click on the Pencil tool and move across the bottom edge of the image to locate mid point.
9. Click on the pencil and draw a line that measures 1 1/2" up Push/Pull TOOL BACK 1/2"
11. Click on the circle tool and draw a circle where the wheel axle will be drilled. Before clicking anything else type in the dimension 5/32" in the dimension setting location in the lower right corner and press enter.
12. Click on the Zoom tool and zoom in on the axle hole.
13. Click on the Push/ Pull tool and Push in the center of the hole to the other end of the Prop car image.
14. View image in X-Ray mode.