

Dream Home Design Project

Your Dream Home project will consist of 4 different requirements.

- A rough sketch of your home done on a blank sheet of paper
- A detailed scale drawing completed on graph paper
- A floor plan created using Google Sketch up
- A 3D Rendering also completed in Google Sketch up
- Max of 5,000 square feet

Part 1: Rough Sketch

Directions:

First I want you to look at some floor plan designs using the Internet. If you simply type in “floor plans” in a Google search some good websites will come up. **You are NOT copying a design that you find.** What you are doing is using this as a reference to find out what some average room sizes are.

Now using a ruler and a pencil you will need to start making a rough floor plan layout of your dream home. It doesn't need to be made to an exact scale but should have dimensions, rooms labeled and show the layout of your home.

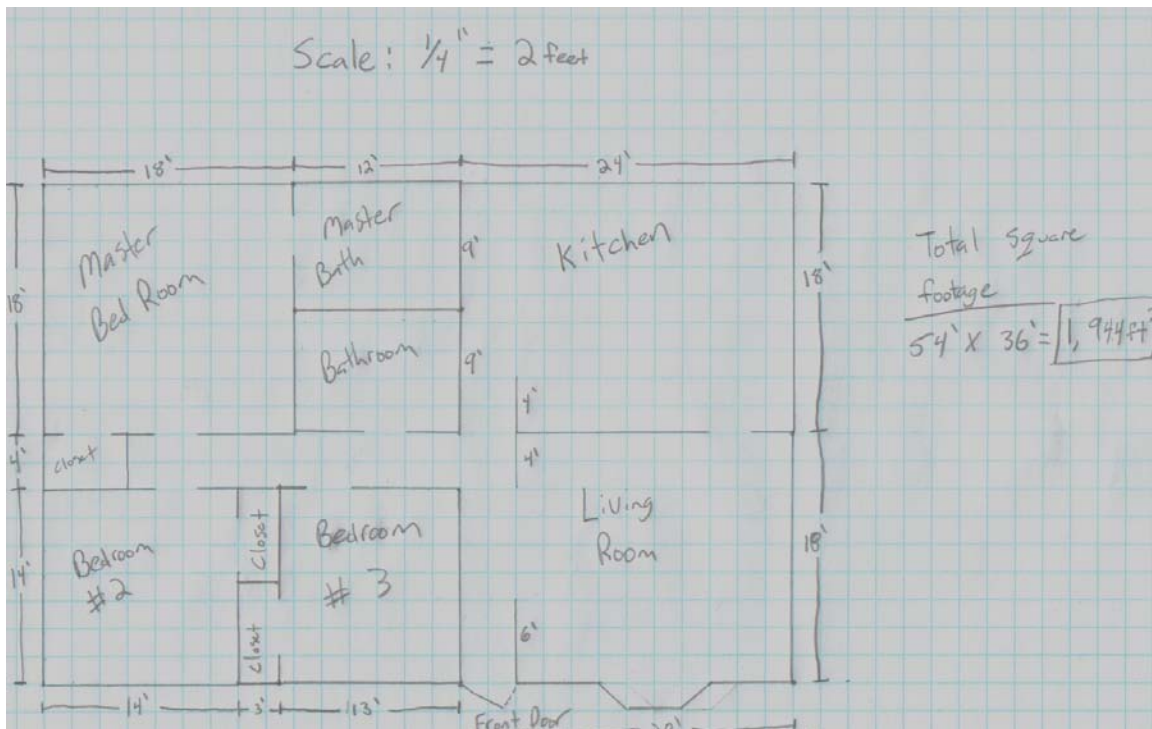
Part 2: Scale drawing using Graph Paper

Directions:

Using the graph paper provided by your instructor you will be drawing a floor plan of your dream home to an exact scale. This will serve as the “plans” you will be using to create the home on the computer.

Make sure of the following when making this scale drawing:

- You make straight lines using a ruler
- You are using a proper scale – such as $\frac{1}{4}$ inch (or 1 square) = 2 feet
- All rooms are labeled
- Each wall's size is written in feet
- Is solved for total square feet (Length times Width)
- If you have multiple floors you will need to make a drawing for each level. (Make sure that the 2nd floor is not bigger than the 1st. It needs to fit on top of it.)
- Just leave 3 foot openings for interior doors



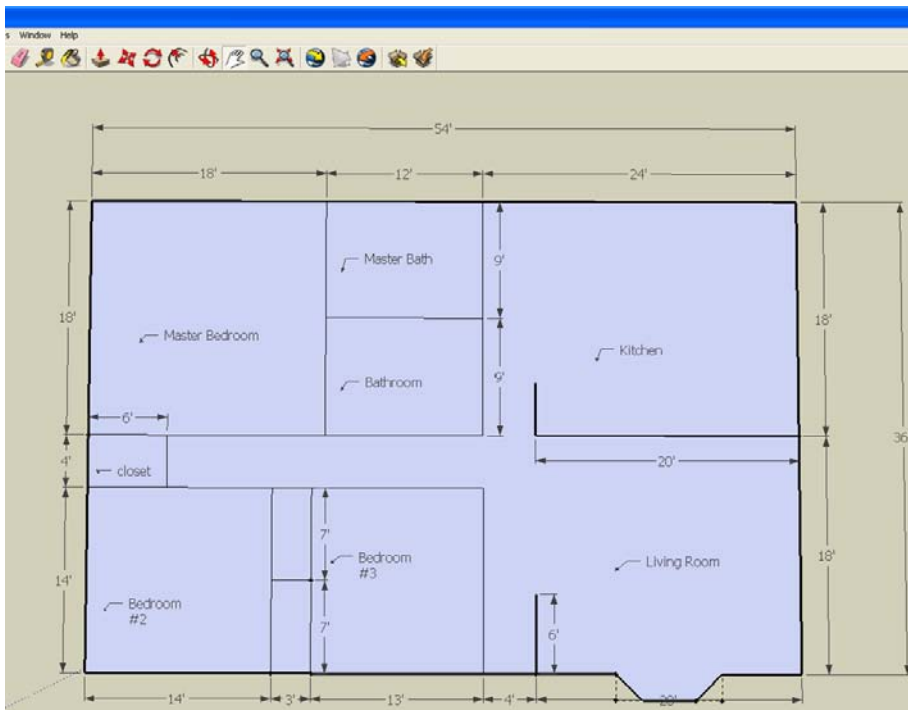
Part 3: Creating the 2D floor plan

For this portion of the project you will need to use Google Sketch Up.

- 1st draw the outline of your home

- Next you will need to draw lines for the individual rooms inside your home. You may need to use the “Tape Measure” tool to find locations of certain walls.
- Don’t worry about leaving door openings. We will place these later. If you don’t have a door just an opening then leave that open.
- Use the Red and Green lines in Sketch up as a guide to make sure that your walls are square.
- Use the “Dimension tool” found in the “tools” menu to place dimension lines on your walls. You will only need to dimension 1 wall of some rooms if the opposite wall is the same.
- Last use the “Text” tool found in the “tools” menu to label your rooms.

It should look something like this:



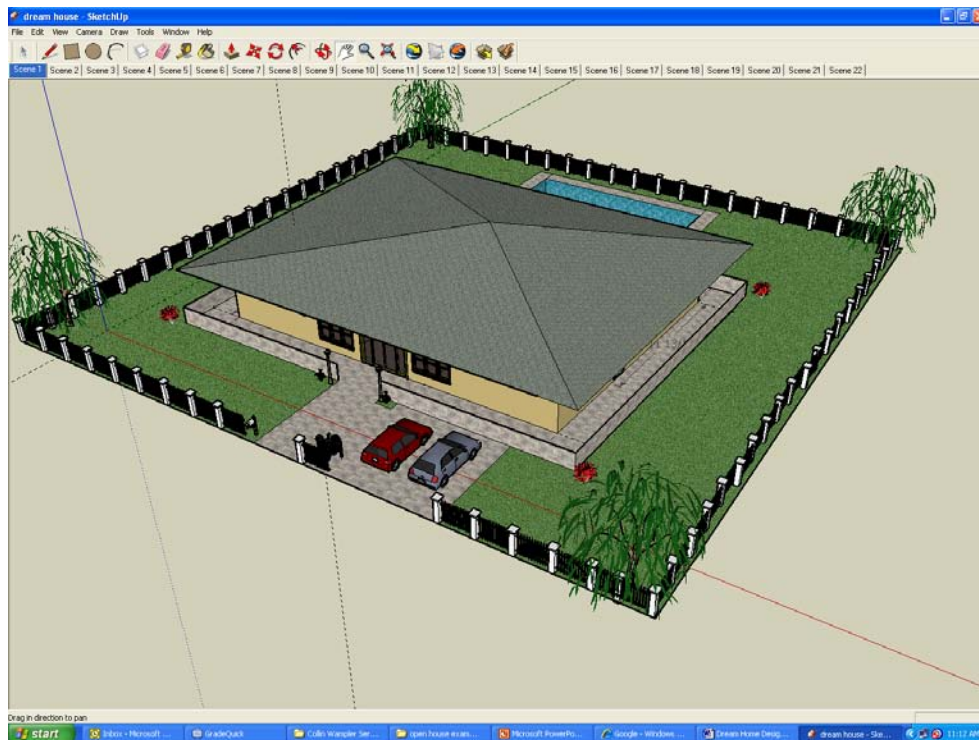
Name this file “*your name* – floorplan” and save to your folder.

Part 4: Creating a 3D rendering of your home:

To do this portion of the project you will need to take your file that you saved as “*your name – floorplan*” and you will do another save as except this time you need to name it “*your name – 3D rendering*”.

- First you need to erase all the dimensions and labels that you put on the floor plan.
- The next step is to raise each of your rooms to equal heights using the push/pull tool. (8-10 feet would be a good choice; the house will end up taller after we put on the roof.)
- If you have more than one level then you need to select the entire second story and using the “Move” tool place it on top of the first floor.
- Now it is time to paint your home. You can use both colors and materials such as roofing and siding.
- As far as a driveway, patio or side walk you will need to place these in individually before inserting the lawn.
- Next we want to start adding components to the home. Both inside and out. There is lots of furniture for inside and trees, pools, and outdoor furniture for the outside.

It should look something like this:



House Floor Plan Grading Rubric

Preliminary Sketches

<i>Completed - Both</i>	20			
Accurate representation	3	6	9	12
Dimensions included	3	6	9	
Total square footage	3	6	9	

Computer Project (2D Floor plan)

<i>Includes dimensions</i>	5	10	15	
Rooms Labeled	5	10	15	
Neatness / Quality	5	10	15	

Computer project (3D Rendering)

<i>Shows evidence of planning</i>	5	15	25	
Realistic Appearance	3	6	9	12
Good Traffic Flow	3	6	9	12
Includes furniture	3	6	9	12
Required Rooms	3	6	9	12
Matches rough floor plan	3	6	9	12
Materials / color	3	6	9	12
Animation Walkthrough	3	6	9	12
Complete – everything is put together	6	9	12	

Name _____ **Period** _____ **Score** _____ **of 215**