Geometry

Spring Honors Project

Dream Home

Overview
During the last few weeks of the second semester you will design a floor plan and front elevation for your dream house. Look at the examples provided on this sheet as well as examples found online. To complete the project you will have to apply principles found within the discipline of Geometry.

Materials
- Two pieces of poster board with grid lines
- Color pencils
- Ruler
- Compass
- Computer

Directions
You have two choices as to how you can complete this project:
- through computer generated images (PowerPoint, online program, etc.)
  - you may generate a floor plan, but you cannot just copy and paste it
- images drawn by hand

Property/Floor Plan
- Scale
- The location of your property (city, state, country)
- Price to build per square foot in that area
- At least three bedrooms (include the closets)
- At least two bathrooms (include the sinks, toilet, bath tub, shower, and closet)
- Kitchen (include sinks, refrigerator, dishwasher, and stove)
- Living room
- Family room
- Garage
- Doors and windows
- Additional rooms you would want to include (at least one)
- Any amenities you would want to include (basketball court, tennis court, pool, boat dock, etc.)
- One room must be a circle or octagon
- One room must be a quadrilateral besides a square or rectangle
- The dimensions of each room
- Total square footage of the home (given as a radical and rounded to the nearest foot)
- Acreage of the property
- Legend of symbols (sinks, toilets, bath tubs, etc.)

Front Elevation
- Draw the view of the front of your home to the scale of your floor plan
- Take into account that normal ceiling height is eight feet; high ceilings are normally ten feet; you may include cathedral or vaulted ceilings anywhere in your home (make note of this on the floor plan)
- In color

Due Date
June 3
Examples of Floor Plans

FIRST FLOOR PLAN
Example of Front Elevations