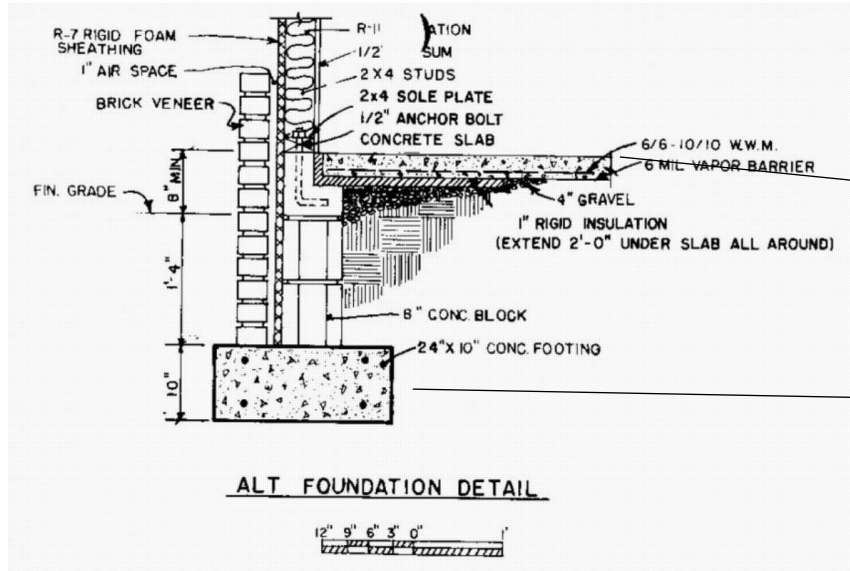


DUE DATE IS OCTOBER 7th!!!



Concrete Slab = (addition of all the areas) x 4 inches
[for volume]

Concrete Footing =
24 inches x 10 inches
x Perimeter
(for volume)

Always change units BEFORE you start multiplying for area! UNITS HAVE TO MATCH

So decide: is it better to use feet or better to use inches?

Directions - MAKE SURE YOU DOWNLOAD THE ANSWER SHEETS FROM MY BLOG - NO SHEETS-NO CREDIT:

(Part 1 - 60 pts)

Your task is to find the perimeter of the house and the area of the property for the original drawings you see here. Find the volume of concrete needed for both the area and the perimeter. You will also need to do this for the footings and the pilings. Use either Lowe's or Home Depot to find the cost of concrete needed.

(Part 2 - 40 pts)

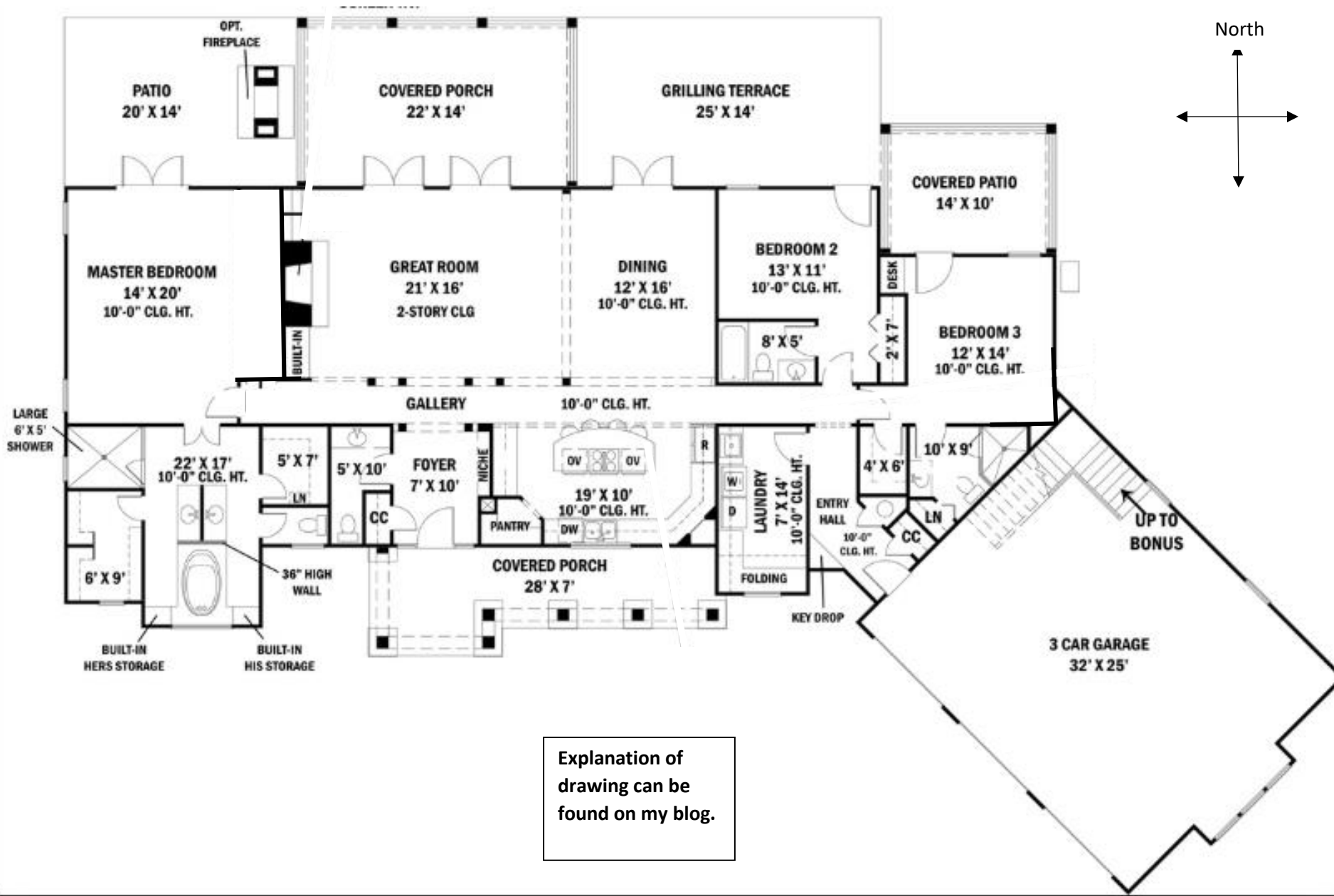
The client has decided to expand the home but they do not know by how much. The client said they would like the following changes:

- (a) Master Bedroom is $(x + 14) \times (x + 20)$
- (b) Great Room is $21 \times (x + 16)$
- (c) Dining Room is $12 \times (x + 16)$
- (d) Bedroom 2 is $13 \times (x + 11)$
- (e) The three car garage is now $(x + 32) \times (x + 25)$

Find the new area and perimeter for the home. This will be a polynomial.

(BONUS) - 10 pts

Find the cost to put carpet in the three bedrooms. Find the cost to put tile in all the bathrooms and the laundry room. Find the cost to put hardwood flooring in the great room, dining room, kitchen, foyer, gallery, and entry hall. Find the total cost for all upgrades.



Concrete Slab is the area that covers the entire home plus garage and all exterior areas. Slab is 4" thick. You will need the volume – change units!

Concrete Footing is the perimeter of the home and garage (outline of property). Concrete pilings are 6' deep, 8" wide, 16" long – located at the black squares.

Answer Sheet – PART A

Part A – Perimeters (15 pts)		Part A – Areas (30 pts)					
Perimeter of Home - North		Area of Patio		Area of Bedroom 3		Area of Dining	
Perimeter of Home - South		Area of Covered Porch		Area of Large Shower, closet, his/her bathroom		Area of Entry, Hall closet, Side Bathroom	
Perimeter of Home - East		Area of Grilling Terrace		Area of Gallery		Area of Bedroom 2 - including bathroom	
Perimeter of Home - West		Area of Covered Patio		Area of Foyer w/bathroom		Area of Garage & Covered Porch	
Total Perimeter (in feet)		Area of Master Bedroom		Area of Kitchen and Pantry		Total Area (in feet)	
Total Perimeter (in inches)		Area of Great Room		Area of Laundry Room		Total Area (in inches)	
Part A – Volumes (15 pts)							
Volume of Perimeter Footing (in feet)		Volume of all Pilings (in feet)		Number of Bags of Concrete Needed for Volume		Cost of Concrete	
Volume of Concrete Slab Using Area (in feet)		Total Volume (in feet)		Company You Used to Find Cost of Concrete (insert link of the actual page)			

Answer Sheet – PART B

Part B - Perimeters (20 pts)		Part B - Areas (20 pts)					
Perimeter of Home - North		Area of Patio		Area of Bedroom 3		Area of Dining **polynomial	
Perimeter of Home - South		Area of Covered Porch		Area of Large Shower, closet, his/her bathroom		Area of Entry, Hall closet, Side Bathroom	
Perimeter of Home - East		Area of Grilling Terrace		Area of Gallery		Area of Bedroom 2 - including bathroom **polynomial	
Perimeter of Home - West		Area of Covered Patio		Area of Foyer w/bathroom		Area of Garage & Covered Porch **polynomial	
Total Perimeter		Area of Master Bedroom **polynomial		Area of Kitchen and Pantry		Total Area	
		Area of Great Room **polynomial		Area of Laundry Room			

Answer Sheet – BONUS (10 pts)

Cost

Cost Per Unit

Store Purchased From

	Cost	Cost Per Unit	Store Purchased From
Master Bedroom Carpet Cost			
Bedroom 2 Carpet Cost			
Bedroom 3 Carpet Cost			
Bathroom 1 Tile Cost			
Bathroom 2 Tile Cost			
Bathroom 3 Tile Cost			
Bathroom 4 Tile Cost			
Laundry Room Tile Cost			
Great Room Hardwood Cost			
Gallery Hardwood Cost			
Dining Room Hardwood Cost			
Kitchen Hardwood Cost			
Entry Hall Hardwood Cost			
Foyer Hardwood Cost			
Total Cost for All Upgrades			