Vocational Math for Construction Name_____

100 points

Homework Quiz #1 – Lessons 1, 2 and 3

**Directions**: You may use the following materials during this quiz: Homework, Notes, Tape Measures, Calculator (except for Lesson 2 questions). No copies of other people's work. You MUST show your work to get full credit!!!!

*Each problem is worth 12 points*

## No Calculators on the Lesson 2 questions below:

**From Book page #21 (from Lesson 2)**

1. Do all of problem #8: What is the total thickness of three pieces of plywood 5/16 inch, 5/8 inch, and 7/8 inch thick? *Be sure to show your calculations and enough work so that it is clear it was done without a calculator.*

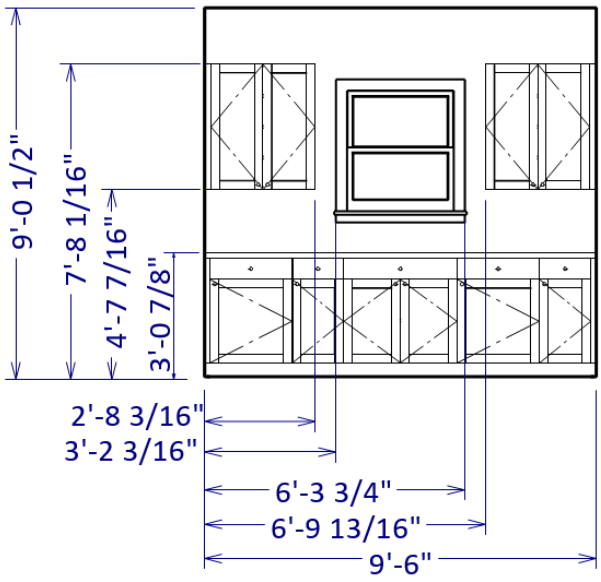
**From Book page #25 (from Lesson 2)**

2. Do all of problem #3: Find the thickness of a board ¾ thick after 1/16 inch is planed off one side. *Be sure to show your calculations (or explain what you did) and enough work so that it is clear it was done without a calculator.*

**From Lesson 2 practice set (last page of the Lesson 2 packet)**

3. Do just the problem shown below. *Be sure to show your calculations (or explain what you did) and enough work so that it is clear it was done without a calculator.*

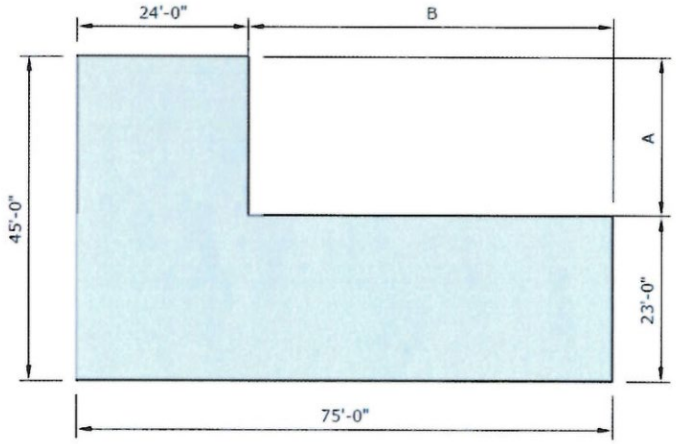
   What is the distance from the top of the wall cabinet to the ceiling?



Homework Quiz #1 – Lessons 1, 2 and 3

**From Book page #12 (from Lesson 1)**

4. Do the following pieces of the assignment for #27:
    a. Give the estimate you determined for the number of square feet of floor space for the building shown. *Write your estimate and explain how you determined it.*

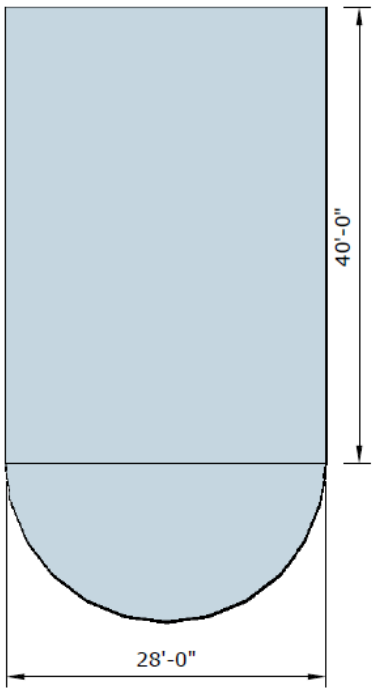



    b. Show the calculations you made to find the answer to part c (Total Area). *Show what you typed into your calculator and write your answer with units.*

**From Lesson 1 practice set (last page of Lesson 1 packet)**

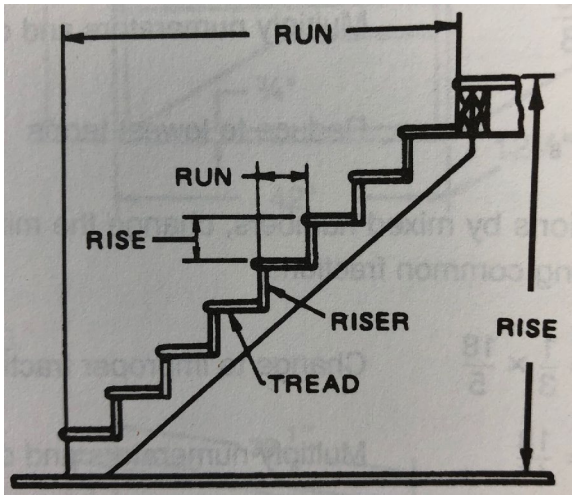
5. Do all of this problem:

    A former basketball star decides to build his home in the shape shown below. What will the perimeter of his home be? *Be sure to show your calculations (you can just write down what you typed into your calculator) and include units in your answer.*



**From Book page #30 (from Lesson 3)**

6. Do all of problem #16: The flight of stairs shown has 9 risers. The height of each riser is 7 3/8 inches. What is the height from floor to floor (total rise)? *Be sure to show your calculations. You can just write what you typed into your calculator. Include units in your answer.*




**From Book page #32 (from Lesson 3)**

7. Do ***part d only*** of problem #27: What length of each kind of material is needed to fill the order in the chart below? (Remember that the number of saw kerfs is always one less than the number of pieces needed). *Be sure to show your calculations. You can just write what you typed into your calculator. Include units in your answer.*

| Material | Quantity | Length | Allowance for Each Saw Kerf | Total Length Required |
|---|---|---|---|---|
| a. Bed Molding | 10 | 8½" | 1/16" | |
| b. Door Casing | 4 | 30⅜" | ⅛" | |
| c. Dowel Rod | 32 | 1⅛" | 1/16" | |
| d. Quarter Round | 6 | 15¼" | ⅛" | |
| e. Cove Molding | 9 | 10⅞" | ⅛" | |
| f. Screen Molding | 5 | 3 1/16" | 3/32" | |

**From Book page #35 (from Lesson 3)**

8. Do all of problem #21: If 1/4 inch represents 1 foot on a drawing, how many feet are represented by 10 1/8 inches? *Be sure to show your calculations so it is clear how you found your answer. Include units in your answer.*