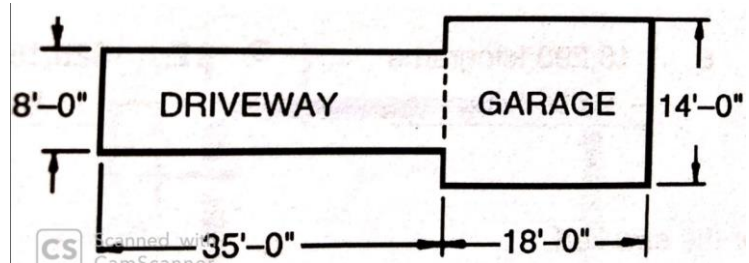
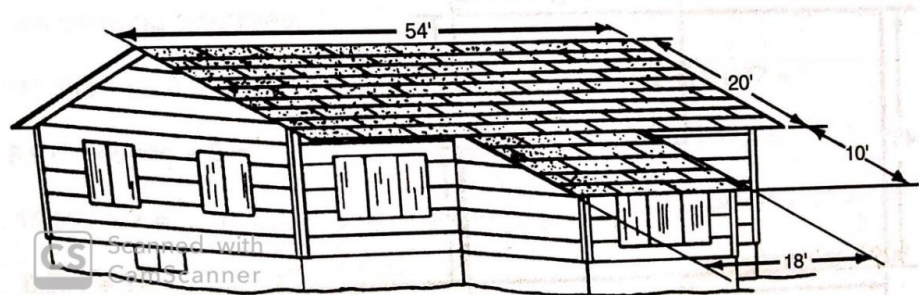


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1. (Page 5 #28) A garage floor and driveway are poured in a single slab. The solid lines in the picture indicate location of forms. Find the number of linear feet of 2 x 4s needed to create the forms for the driveway and garage as shown. (Do not make allowance for joints at the corners of the forms.)

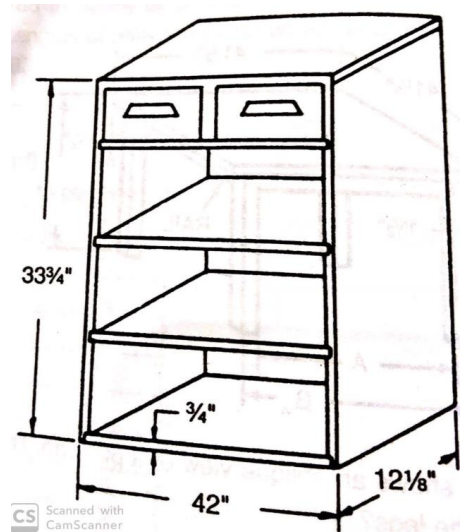


2. (Page 11 #19) The picture below shows the dimensions of a gable roof that is to be shingled. Determine the number of square feet that the side of the roof shown contains.



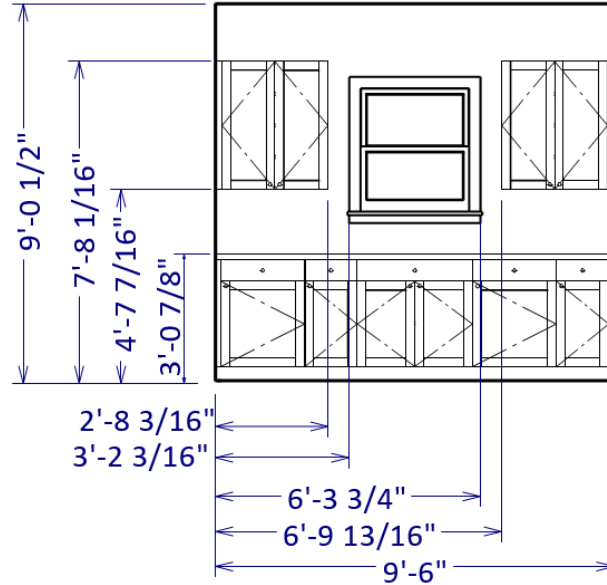
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3. (Page 11 #22) In making a table, 19 board feet of oak are used, including waste. How much stock is needed to complete an order for 54 tables?
4. (Page 23 #26) The forewoman on a job gives you the job of ripping a $\frac{7}{8}$ inch piece, a $1\frac{1}{4}$ inch piece, a $2\frac{7}{16}$ inch piece, and a $3\frac{3}{4}$ inch piece from a 4-foot by 8-foot panel of $\frac{3}{4}$ inch plywood. If you allow $\frac{1}{8}$ inch for each saw kerf, how much of the panel's width is used? NO CALCULATOR ON THIS PROBLEM
5. (Page 28 #19) In the picture shown, all material is $\frac{3}{4}$ inch thick plywood. The shelves have dados $\frac{3}{8}$ inch deep. Determine the overall length of the shelves in the cabinet. NO CALCULATOR ON THIS PROBLEM



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6. Use the figure below to answer the question: How much space is there between the counter and the bottom of the upper cabinets? NO CALCULATOR ON THIS PROBLEM



7. (Page 138 #4) Estimate the number of square feet of plywood needed to completely cover a floor 28 feet wide and 48 feet long. Draw a picture, explain your strategy and write your answer with units. NO CALCULATOR ON THIS PROBLEM

8. (Page 138 #5) If you are using $\frac{3}{8}$ " thick plywood that costs \$15.93 per sheet, determine how much you'll spend on the plywood (ignore tax) for the floor in question 7. Include 10% for waste.

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9. (Page 30 #18) A flight of stairs has 14 risers, each $7\frac{1}{4}$ inches high. What is the total rise?

10. (Page 34 #14) You need to figure out if you have enough plywood for the job you are working on. Determine the number of pieces of $\frac{3}{8}$ inch plywood in a stack 30 inches high.

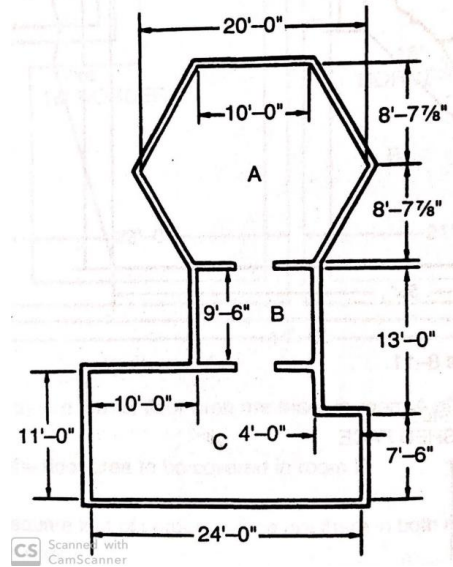
11. (Page 78, #40) What is the perimeter of the semicircular form in the picture below if the radius is 2 feet 3 inches?



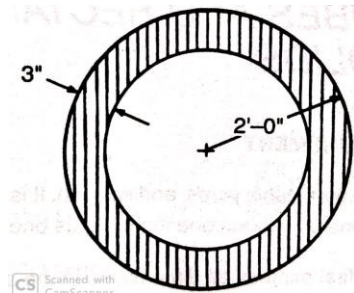
12. (Page 86, #18) The four sidewalls of a room 14 feet 6 inches wide and 17 feet 8 inches long are paneled to a height of 5 feet 6 inches. A deduction of 27 square feet is made for door and window openings in the room. How many square feet of wall surface are covered?

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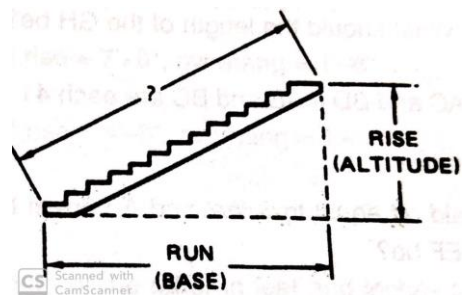
13. (Page 100, #12) In room A of the picture below, how many square feet of drywall (to the nearest foot) does it take to cover the ceiling?



14. (Page 103 #11) A stencil is used to aid in spray painting a playground. What is the area of the surface to be painted (the shaded area in the picture below)?

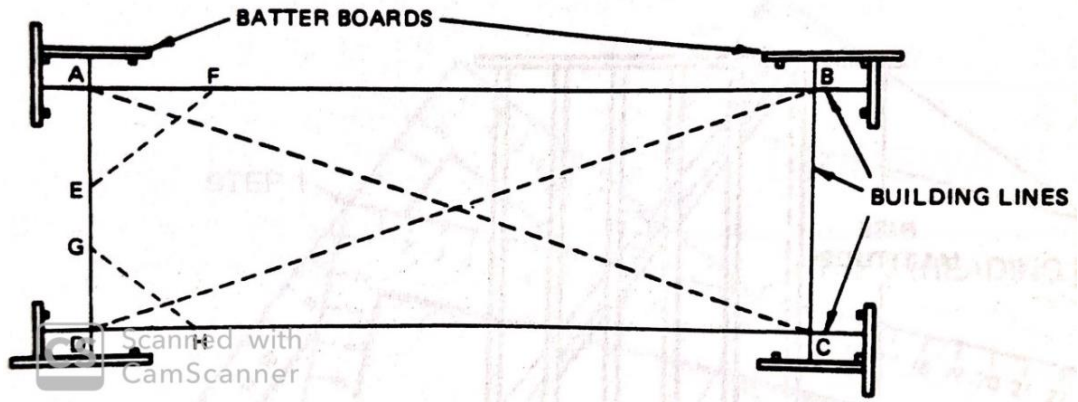


15. (Page 129 #9) Use the picture below of the stairway to help you answer the question. What is the total length of the stairway if the total rise is 5' 2" and the total run is 7' 6"?



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16. (Page 130 #13) Use the picture below to answer the following problem: In checking to find out if the corner D is square, GD is laid off equal to 9 feet and DH is laid off equal to 12 feet. What should the length of GH be?



17. You are trying to determine if the foundations in the picture below are square. What should the diagonal measurements be if the foundation is square?

