

Missing – Pythagorean theorem. Shape different than a rectangle or triangle, estimating, equal spacing, % slope

Page 34 #13. A line is drawn so that $\frac{1}{2}$ inch represents 1 foot. How many feet are represented by a line 4 inches long?

Page 35 #21. If $\frac{1}{4}$ inch represents 1 foot on a drawing, how many feet are represented by $10\frac{1}{8}$ inches?

Page 37 #9. If $\frac{1}{4}$ inch on a drawing represents 1 foot, how many inches on the drawing represent 18 feet?

Page 40 #16. A contractor submits a bill of \$1,906.42 for framing material and trim, \$65.50 for hardware, \$462.00 for masonry, \$170.35 for painting, and \$850.67 for labor. What is the total amount for the items listed?

Page 43 #11. A contract is accepted for \$25,050.00. The total cost of material and labor is \$22,709.79. How much is the profit on the contract?

Page 43 #12. A carpenter accepts a job for \$575.00. Bills for materials and labor are \$113.52, \$287.61, and \$78.92. What is the profit?

Page 44 #26. An estimate of \$181.75 is submitted for a job. If \$44.25 is for labor, what is the cost of materials?

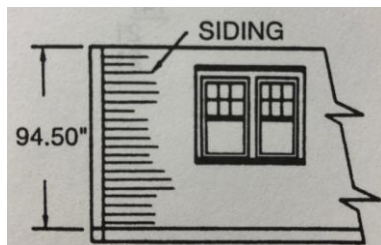
Page 47 #7. If one square foot of wall requires 6.25 firebricks, find the approximate number needed for 33 square feet.

Page 47 #9. Laying fiberglass roofing on an irregular roof is estimated to take 2.6 hours per square. How long will it take to lay 14.4 squares?

Page 47 #10. The material needed for a counter is estimated to be 81.9 board feet, at a cost of \$3.15 per board foot. What is the total cost of the material?

Page 34 #12. When laying $3\frac{1}{4}$ inch wide flooring in a 13-foot by 15-foot room, how many courses will be required for the 13-foot width?

Page 50 #15. In the illustration, each of 21 courses of siding is equally exposed to the weather. How many inches on each piece of siding are exposed to the weather?



Page 53 #10. The actual width of a pine board is $7\frac{1}{4}$ inches. Write the width in decimal form.

Page 53 #12. A piece of plywood is 0.625 inch thick. What is its thickness in common fraction form?

Page 53 #13. Find the approximate thickness in common fraction form of a piece of siding 0.4375 inch thick.

Page 59 #4. How many square feet of floor felt should be ordered for a job when the area of the floor is 1,540 square feet and 15% of the area is allowed for waste?

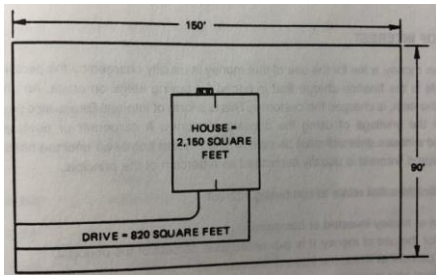
Page 61 #16. A general contractor estimates a nonresidential building to cost \$125,860. If the work of excavating and grading is 3% of this amount, the concrete work is 20%, and the carpentry is 9%, what is the amount estimated for each of these three items?

Excavating and grading = _____ concrete work = _____ carpentry = _____

Page 62 #29. A contracting company submits a bid for an apartment house. The estimated cost is \$181,693.21. To this, add 23% of the estimated cost for overhead and 9% of the estimated cost plus the overhead for profit. What is the final bid?

Page 63 #32 (BONUS??). What percent of the lot illustrated is taken up by the house and driveway?

Note: Area of a rectangle = length x width



Page 65 #8. A bank loans \$44,250 to a contractor at a rate of 9% per year. What is the interest payment for the first year?

Page 69 #7. A discount of 2% is allowed for cash. If the amount of cash paid is \$1,225, find the original amount of the bill.

Page 69 #8. Cost is \$15.86 after taking 35% off of the catalog price. Find the catalog price.

Page 69 #13. If cost is \$15.86 after taking 20% off the catalog price, find the catalog price.

Page 69 #14. When the amount paid is \$154 after a 15% discount is allowed, determine the original amount of the bill.

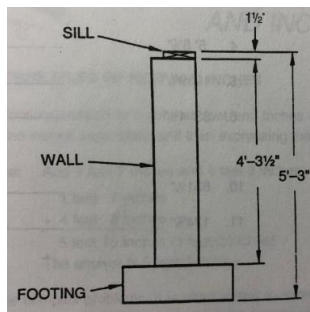
Page 69 #1. List price is \$5,670, and discount is 12% of this price. Find the cost.

Page 70 #18. A contractor orders material that costs \$1,926.90, less 2% if paid within 30 days. How much is due if the bill is paid 10 days after ordering?

Page 71 #25. A contractor purchases oak lumber for \$1,400, less 2% discount; yellow pine for \$596, less 2% discount; and white pine for \$896.50, less 1% discount. What is the total amount of the bill?

NO CALCULATOR

For 17 and 18 (use harder numbers)

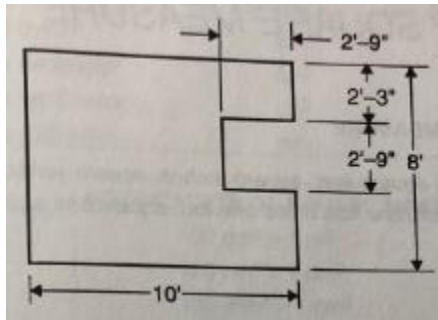


Page 82 #17. What is the combined height of the wall and the sill?

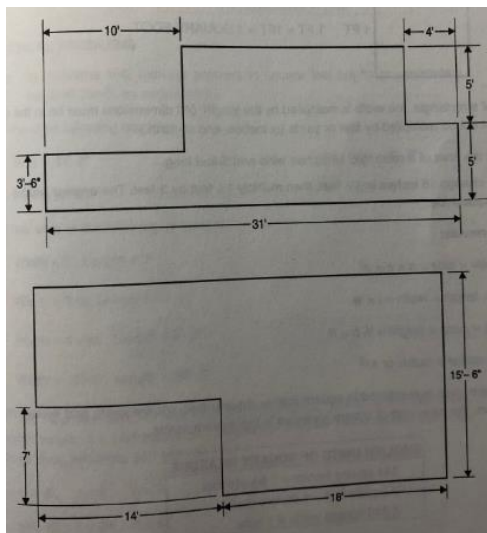
Page 82 #18. What is the height of the footing?

Page 82 #19. How much would have to be cut from the end of a 12 foot piece of lumber to leave a piece 8 feet 5 inches long

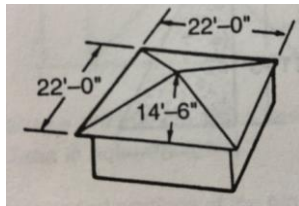
Page 83 #22. Find the perimeter of the house footprint below



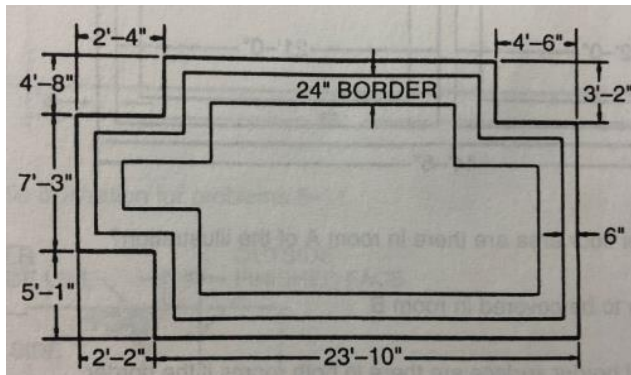
Other possibilities



Page 89 #5. What is the area of the hip roof shown if the length of one side is 22 feet and the common rafter length is 14 feet 6 inches as shown in the image below.

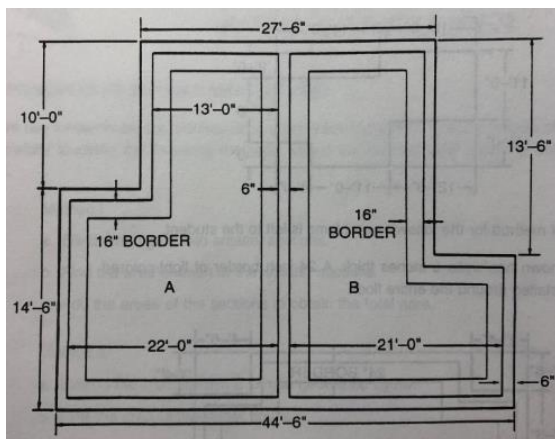


Page 97 #3. The plan shown has walls 6 inches thick. A 24-inch border of light-colored carpet is installed around the entire floor as shown in the image below.

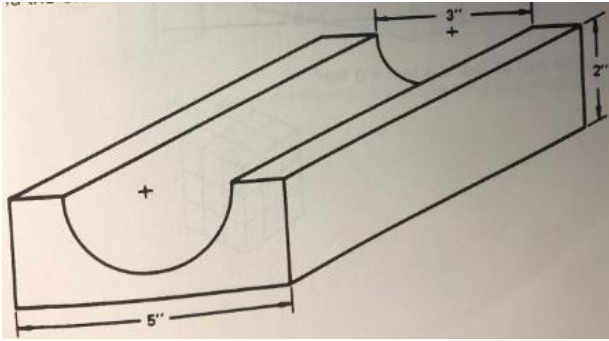


- Determine the area included within the walls
- Find the area of the 24-inch wide light-colored border carpet

Page 98 #6. How many square feet of border surface are there in both rooms if the border is 16 inches wide?



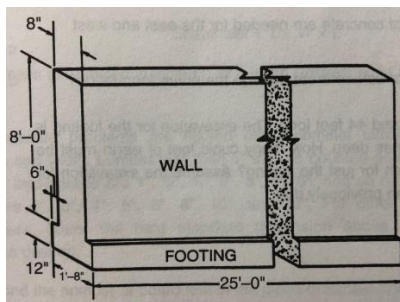
Page 103 #13. Find the cross-sectional area of the wooden block illustrated.



Could also make this a volume problem

GOOD EXAM QUESTION → Page 107 #15. A large building requires a basement 9 feet deep, 78 feet wide, and 96 feet long. How many cubic yards of earth must be removed if an additional 15% must be removed for the foundation and floor?

Page 107 #17. The illustration shows a section of a concrete foundation wall and footing. How many cubic yards of concrete does it contain? Round answer to the nearest tenth of a yard.



Page 159 #7. A roll of roofing paper covers an area of 100 square feet. How many rolls are needed for a shed roof measuring 12 feet by 16 feet? Do not allow for waste.

Page 158 #2. Added to the lesson 9 homework instead

Page 152 #1. How many square feet of sheathing are required to cover a wall 8 feet by 26 feet? Make no allowances for openings.

GOOD FOR EXAM → Page 153 #3. Plywood is used as sheathing for the exterior walls of a home that measures 28 feet by 48 feet by 8 feet. How many 4 x 8 foot sheets of $\frac{1}{2}$ inch plywood are needed? Allow 10% for waste.

Page 153 #4. A wall 37 feet long is to be sheathed to a height of 12 feet. How many square feet of structural insulation board are required?

Page 165 #8. Determine the number of rolls (400 square feet per roll) of builder's felt needed to cover the walls of a house measuring 28 feet by 46 feet by 9 feet

ADD as a BONUS a % of a % problem (page 70)