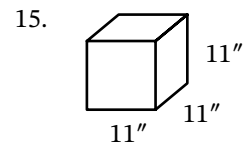
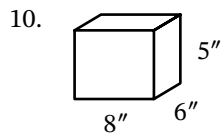
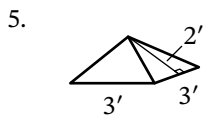
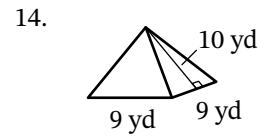
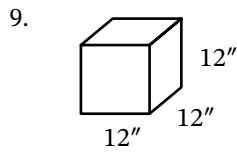
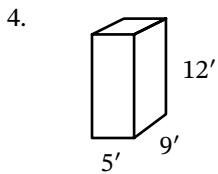
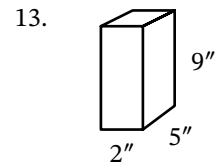
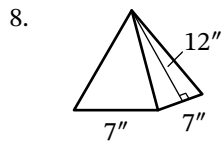
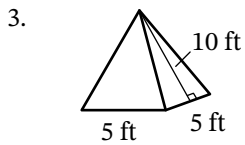
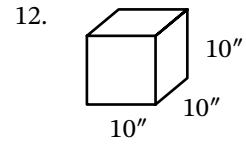
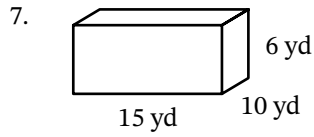
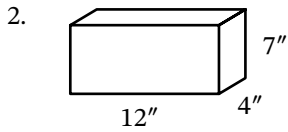
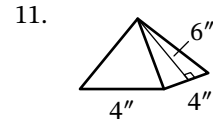
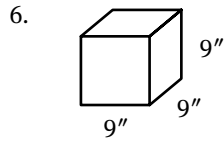
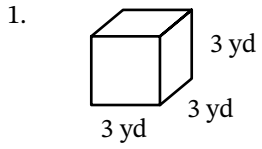
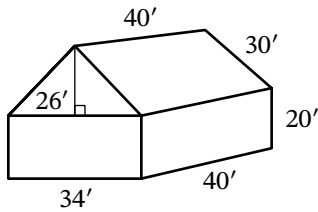


Find the surface area.



Use the diagram below to answer questions 16–19.



16. What is the surface area of the rooftop of the house?

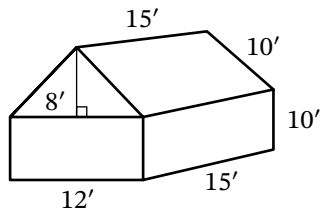
17. A “square” of shingling material is $10' \times 10'$ or 100 square feet.

Using your answer from #16, tell how many squares of asphalt shingles are needed to cover the roof.

18. Find the surface area of the sides of the house.

19. A “square” of vinyl siding is also $10' \times 10'$ or 100 square feet. Using your answer from #18, tell how many squares of vinyl siding you would need to buy to cover the sides of the house. You cannot buy part of a square.

Use the diagram below to answer questions 20–22.



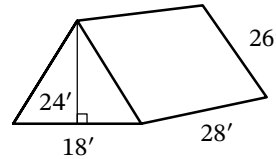
20. The exterior of the storage unit shown above needs to be painted (not including the roof). The paint will cover 400 square feet per gallon. Determine how many gallons of paint that you will need to buy for one coat. Remember that you cannot buy part of a can of paint.

21. Use your answer from #20 to help you. You decide to paint one coat of primer and two coats of finish paint. How many gallons of paint will you need to paint two coats? How many gallons of primer will you need to paint one coat?

22. Use your answer from #21 to help you.

Find the total cost for the paint and the primer if paint costs \$35 per gallon and primer costs \$30 per gallon.

23. Find the surface area of the triangular front and back walls of the tent.



24. Alice wants to wrap a gift box of length 8 inch, height 6 inch, and width 4 inch.

How many square inches of wrapping paper does Alice need?

25. A cereal company wants to change the dimensions of its cereal box to attract the attention of shoppers. The original cereal box has dimensions of $8'' \times 3'' \times 11''$. The new box would have dimensions of $10'' \times 10'' \times 3''$. Which box would require more materials to make (i.e. has a larger surface area)?