

5. Which of the nets below corresponds with the shape of a cube, as seen in Figure 1?

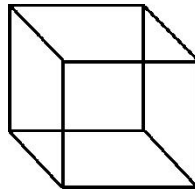
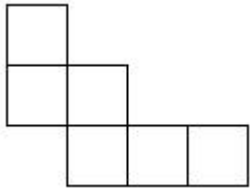
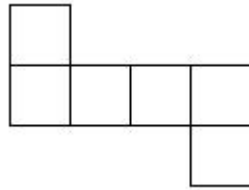


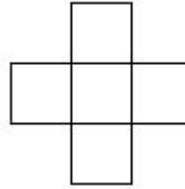
Figure 1



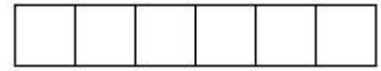
(1)



(2)

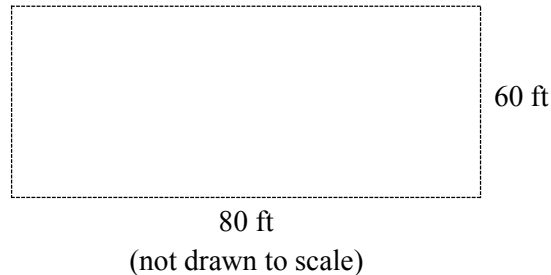


(3)



(4)

6. A diagram of Mr. Hill's backyard is shown below.



Mr. Hill wants to plant grass seed in his yard. He needs to know how much seed he should buy. What is the area of Mr. Hill's yard?

Show your work. You must include the formula.

Answer _____ square feet

7 The Cobb's master bedroom measures 12 feet by 16 feet. The carpet cost was \$33.00 per square yard including installation. What was the cost of the carpet before sales tax?

(1) \$ 192.00

(2) \$ 704.00

(3) \$ 1,848.00

(4) \$ 6,336.00

8. Ethan has two different types of wallpaper in his house, patterned and solid wallpaper. The ratio of patterned wallpaper to solid wallpaper is 1 to 4. What percentage of each type of wallpaper does Ethan have in his house?

Show your work.

Patterned Wallpaper _____% **Solid Wallpaper** _____%

9. Mary has \$608 in her budget for her new room. She withdraws 15% of the money to buy a desk for her room. Which is the best estimate for the amount of money Mary withdraws?

Show your work and circle your answer choice.

(1) \$510

(3) \$40

(2) \$90

(4) \$400

10. On the grid below, draw a rectangle with a perimeter of 34 units.



What are the lengths of each of the four sides of the rectangle?

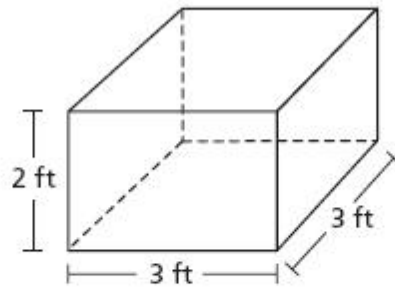
_____ units _____ units _____ units _____ units

14. A doll house has been built with a scale of 1 inch = 18 inches. If the table in the dining room of the doll house measures 1.75 inches by 3.5 inches, which of the following represents the actual measures of the table?

- (1) 31.5 inches by 63 inches
- (2) 31.5 inches by 18 inches

- (3) 10.29 inches by 5.14 inches
- (4) 19.75 inches by 21.5 inches

15. Rashid needs to buy some wood to build a box. He must calculate the surface area of the box to determine how much wood to buy. A diagram of the box is shown below.



[not drawn to scale]

How much wood does Rashid need to buy to build the box?

Show your work.

Answer _____ square feet

16. Matt went to the *Used Appliance Depot* to purchase appliances for his new kitchen. He spent \$25.75 on an overhead light, \$15.49 on an extension cord, and \$9.95 on a set of light bulbs, before tax. Tax was 8.25% on all purchases. What was the total cost of Matt's purchases including tax?

Show your work.

Answer \$ _____