Name _____

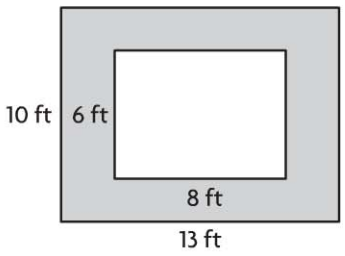
Problem Solving • Find the Area

COMMON CORE STANDARD CC.4.MD.3

Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

Solve each problem.

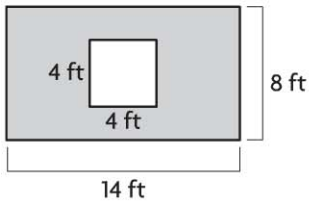
1. A room has a wooden floor. There is a rug in the center of the floor. The diagram shows the room and the rug. How many square feet of the wood floor still shows?



82 square feet

Area of the floor: $13 \times 10 = 130$ square feet
Area of the rug: $8 \times 6 = 48$ square feet
Subtract to find the area of the floor still showing: $130 - 48 = 82$ square feet

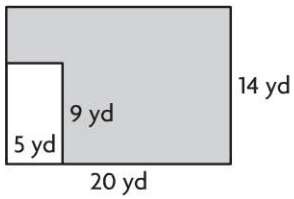
2. A rectangular wall has a square window, as shown in the diagram.



What is the area of the wall NOT including the window?

_____

3. Bob wants to put down new sod in his backyard, except for the part set aside for his flower garden. The diagram shows Bob's backyard and the flower garden.



How much sod will Bob need?

_____

4. A rectangular painting is 24 inches wide and 20 inches tall without the frame. With the frame, it is 28 inches wide and 24 inches tall. What is the area of the frame not covered by the painting?

_____

5. One wall in Jeanne's bedroom is 13 feet long and 8 feet tall. There is a door 3 feet wide and 6 feet tall. She has a poster on the wall that is 2 feet wide and 3 feet tall. How much of the wall is visible?

_____

© Houghton Mifflin Harcourt Publishing Company

TEST PREP

Lesson Check (CC.4.MD.3)

1. One wall in Zoe's bedroom is 5 feet wide and 8 feet tall. Zoe puts up a poster of her favorite athlete. The poster is 2 feet wide and 3 feet tall. How much of the wall is not covered by the poster?

   (A) 16 square feet
   (B) 34 square feet
   (C) 35 square feet
   (D) 46 square feet

2. A garage door is 15 feet wide and 6 feet high. It is painted white, except for a rectangular panel 1 foot high and 9 feet wide that is brown. How much of the garage door is white?

   (A) 22 square feet
   (B) 70 square feet
   (C) 80 square feet
   (D) 81 square feet

Spiral Review (CC.4.OA.4, CC.4.NF.2, CC.4.MD.2, CC.4.MD.3)

3. Kate baked a rectangular cake for a party. She used 42 inches of frosting around the edges of the cake. If the cake was 9 inches wide, how long was the cake? **(Lesson 13.4)**

   (A) 5 inches
   (B) 12 inches
   (C) 24 inches
   (D) 33 inches

4. Larry, Mary, and Terry each had a full glass of juice. Larry drank $\frac{3}{4}$ of his. Mary drank $\frac{3}{8}$ of hers. Terry drank $\frac{7}{10}$ of his. Who drank less than $\frac{1}{2}$ of their juice? **(Lesson 6.6)**

   (A) Larry
   (B) Mary
   (C) Mary and Terry
   (D) Larry and Terry

5. Which of the following statements is NOT true about the numbers 7 and 9? **(Lesson 5.5)**

   (A) 7 is a prime number.
   (B) 9 is a composite number.
   (C) 7 and 9 have no common factors other than 1.
   (D) 27 is a common multiple of 7 and 9.

6. Tom and some friends went to a movie. The show started at 2:30 P.M. and ended at 4:15 P.M. How long did the movie last? **(Lesson 12.9)**

   (A) 1 hour 35 minutes
   (B) 1 hour 45 minutes
   (C) 1 hour 55 minutes
   (D) 2 hours 15 minutes

© Houghton Mifflin Harcourt Publishing Company