

Lesson 13.4

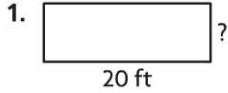
Name _____

Find Unknown Measures

COMMON CORE STANDARD CC.4.MD.3

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

Find the unknown measure of the rectangle.



Perimeter = 54 feet

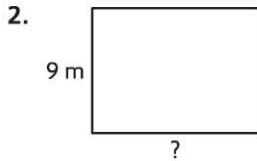
width = 7 feet

Think: $P = (2 \times l) + (2 \times w)$

$$54 = (2 \times 20) + (2 \times w)$$

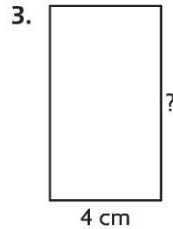
$$54 = 40 + (2 \times w)$$

Since $54 = 40 + 14$, $2 \times w = 14$, and $w = 7$.



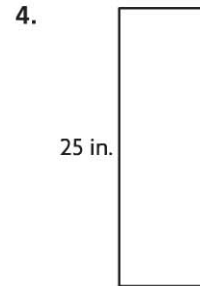
Perimeter = 42 meters

length = _____



Area = 28 square centimeters

height = _____



Area = 200 square inches

base = _____

Problem Solving

5. Susie is an organic vegetable grower. The perimeter of her rectangular vegetable garden is 72 yards. The width of the vegetable garden is 9 yards. How long is the vegetable garden?

6. An artist is creating a rectangular mural for the Northfield Community Center. The mural is 7 feet tall and has an area of 84 square feet. What is the length of the mural?

Lesson Check (CC.4.MD.3)

- The area of a rectangular photograph is 35 square inches. If the width of the photo is 5 inches, how tall is the photo?
 - 5 inches
 - 7 inches
 - 25 inches
 - 30 inches
- Natalie used 112 inches of blue yarn as a border around her rectangular bulletin board. If the bulletin board is 36 inches wide, how long is it?
 - 20 inches
 - 38 inches
 - 40 inches
 - 76 inches

Spiral Review (CC.4.NF.3d, CC.4.MD.2, CC.4.MD.3, CC.4.MD.5a, CC.4.MD.5b)

- A professional basketball court is in the shape of a rectangle. It is 50 feet wide and 94 feet long. A player ran one time around the edge of the court. How far did the player run? (Lesson 13.1)
 - 144 feet
 - 194 feet
 - 238 feet
 - 288 feet
- Hakeem's frog made three quick jumps. The first was 1 meter. The second jump was 85 centimeters. The third jump was 400 millimeters. What was the total length of the frog's three jumps? (Lesson 12.10)
 - 189 centimeters
 - 225 centimeters
 - 486 millimeters
 - 585 millimeters
- On a compass, due east is a $\frac{1}{4}$ turn clockwise from due north. How many degrees are in a $\frac{1}{4}$ turn? (Lesson 11.2)
 - 45°
 - 60°
 - 90°
 - 180°
- Karen colors in squares on a grid. She colored $\frac{1}{8}$ of the squares blue and $\frac{5}{8}$ of the squares red. What fraction of the squares are not colored in? (Lesson 7.10)
 - $\frac{1}{8}$
 - $\frac{1}{4}$
 - $\frac{1}{2}$
 - $\frac{3}{4}$