Name_____ Date_____ Period_____

LESSON 5-5 · SESSION 2 · PREREQUISITE PRACTICE B · SKILL 1 OF 2

Volume of Rectangular Prisms

Builds on Lesson 5-5 Session 1 · 6.G.A.2

TODAY'S LESSON	You will use V = l × w × h with fractions, like 22 × 9 × 1/2 for a slab.
YOU NEED TO	Find volume: base area × height, like 15 × 8 × 6. **You will use it in Practice Form A, problems 1 and 6.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Find** the base area: length × width.
2. **Multiply** the base area by the height.
3. **Write** cubic units, like in³.

WATCH ME

the steps in action

A bin is 15 in long, 8 in wide, and 6 in tall. Find its volume.

Step 1 B = 15 × 8 = 120.

Step 2 V = 120 × 6 = 720.

Step 3 Unit: in³.

Answer **720 in³**

TRY IT WITH HELP

fill in each step

1. A box is 10 cm by 7 cm by 4 cm. Find its volume.

Step 1 B = 10 × 7 = _____

Step 2 V = 70 × 4 = _____

Step 3 Unit: _____

2. A box is 9 ft by 4 ft by 5 ft. Find its volume.

Step 1 B = 9 × 4 = _____

Step 2 V = 36 × 5 = _____

Step 3 Unit: _____

YOUR TURN

use the steps on your own

3. Find each volume.

a. 5 m × 4 m × 3 m _____

b. 6 ft × 6 ft × 2 ft _____

c. 8 cm × 5 cm × 5 cm _____

d. 12 in × 3 in × 2 in _____

e. 11 m × 10 m × 3 m _____

f. 7 cm × 7 cm × 7 cm _____

Find a Missing Dimension

Builds on Lesson 5-2 Session 2 · 6.G.A.1

TODAY'S LESSON	You will find a missing edge, like the width of a 5,400 in³ tank.
YOU NEED TO	Find a missing side: total ÷ the side you know. **You will use it in Practice Form A, problems 2, 3, and 7.**

STEPS TO FOLLOW

use these same steps on every problem

1. **Write** the fact with a ? for the missing number.
2. **Divide** the total by the number you know.
3. **Check**: multiply back to get the total.

WATCH ME

the steps in action

A rectangle has an area of 252 m². Its width is 12 m. Find its length.

Step 1 ? × 12 = 252.

Step 2 252 ÷ 12 = 21.

Step 3 21 × 12 = 252. It checks.

Answer **21 m**

TRY IT WITH HELP

fill in each step

4. A rectangle has an area of 96 cm². One side is 8 cm. Find the other side.

Step 1 ? × 8 = _____

Step 2 96 ÷ 8 = _____

Step 3 12 × 8 = _____

5. A rectangle has an area of 130 in². One side is 13 in. Find the other side.

Step 1 13 × ? = _____

Step 2 130 ÷ 13 = _____

Step 3 10 × 13 = _____

YOUR TURN

use the steps on your own

6. Find each missing number ?.

a. ? × 9 = 117 _____ **b.** 20 × ? = 340 _____ **c.** ? × 15 = 225 _____

d. 11 × ? = 198 _____ **e.** ? × 25 = 400 _____ **f.** 30 × ? = 540 _____

READY CHECK

a problem like the one in today's lesson

7. A box holds 600 in³. Its base area is 50 in². How tall is it?

A 550 in **B** 12 in **C** 650 in **D** 30,000 in

CHECK YOURSELF ☐ I can do this on my own ☐ I need a little help ☐ I have a question about #____