



Volume of Rectangular Prisms

Name: _____

Date: _____

Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence:

A rectangular prism with 4 layers of 15 unit cubes per layer has a volume of 45 cubic units.

Rewrite: _____

2. Fix the sentence:

You can find the volume of a rectangular prism by adding the length, width, and height together.

Rewrite: _____

3. Fix the sentence: A prism 9 cm long, 2 cm wide, and 5 cm tall has a volume of 90 cm².

Rewrite: _____

Part B: Fill in the Blank

Write the missing word or number on each line.

1. A toy chest is 6 ft × 2 ft × 3 ft. Its volume is _____ ft³.

2. The three dimensions used in the volume formula are length, width, and _____.

3. A prism has a volume of 84 cm³. If the length is 7 cm and the height is 3 cm, the width is _____ cm.

4. Each layer of a rectangular prism has 20 cubes and there are 5 layers. The volume is _____ cubic units.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. A lunch box is 10 in long, 4 in wide, and 5 in tall. A pencil case is 8 in × 3 in × 2 in. Which holds more, and by how much?

2. A rectangular prism has a volume of 60 cm³. Give one possible set of whole-number dimensions. Show your work.

Answer Key · Volume of Rectangular Prisms · Grade: Grade 5

Part A: Fix the Sentence

Each sentence has an error. Rewrite it correctly on the line.

1. Fix the sentence:

A rectangular prism with 4 layers of 15 unit cubes per layer has a volume of 45 cubic units.

Rewrite: A rectangular prism with 4 layers of 15 unit cubes per layer has a volume of 60 cubic units.

2. Fix the sentence:

You can find the volume of a rectangular prism by adding the length, width, and height together.

Rewrite: You can find the volume of a rectangular prism by multiplying the length, width, and height together.

3. Fix the sentence: A prism 9 cm long, 2 cm wide, and 5 cm tall has a volume of 90 cm².

Rewrite: A prism 9 cm long, 2 cm wide, and 5 cm tall has a volume of 90 cm³.

Part B: Fill in the Blank

Write the missing word or number on each line.

1. A toy chest is 6 ft × 2 ft × 3 ft. Its volume is 36 ft³.
2. The three dimensions used in the volume formula are length, width, and height.
3. A prism has a volume of 84 cm³. If the length is 7 cm and the height is 3 cm, the width is 4 cm.
4. Each layer of a rectangular prism has 20 cubes and there are 5 layers. The volume is 100 cubic units.

Part C: Short Answer

Answer each question in one or two complete sentences.

1. A lunch box is 10 in long, 4 in wide, and 5 in tall. A pencil case is 8 in × 3 in × 2 in. Which holds more, and by how much?

The lunch box holds more. It has a volume of 200 in³ and the pencil case has 48 in³, so the lunch box holds 152 in³ more.
