

## Finding the Volume of a Rectangular Prism

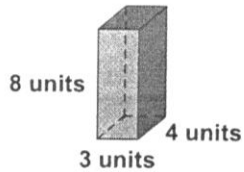
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### SKILLS

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Find the volume of each rectangular prism.

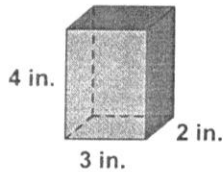
1.



Volume = length × width × height

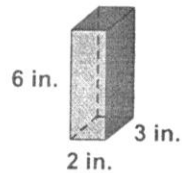
Volume = \_\_\_\_\_

2.



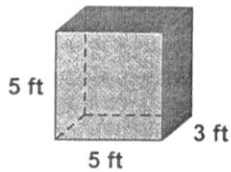
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3.



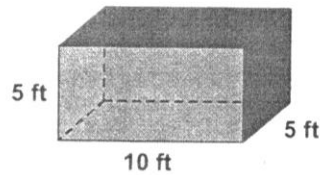
Volume = \_\_\_\_\_

4.



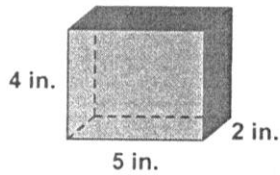
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5.



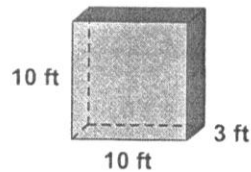
Volume = \_\_\_\_\_

6.



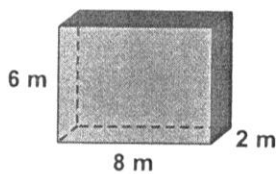
Volume = \_\_\_\_\_

7.



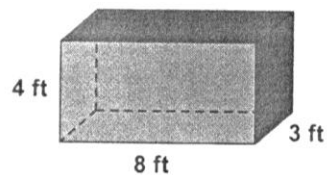
Volume = \_\_\_\_\_

8.



Volume = \_\_\_\_\_

9.



Volume = \_\_\_\_\_

# Finding the Volume of a Rectangular Prism

## CRITICAL THINKING AND PROBLEM SOLVING

10. You bought a CD-portable stereo for your brother's birthday. The stereo is shaped like a rectangular prism that is 15 inches long by 10 inches wide by 6 inches high. You must send it to him, so you put it in a box that is 18 inches long, 12 inches wide, and 8 inches high. How many cubic inches of packing material will you need? (Hint: Find the difference between the volume of the box and the volume of the stereo.)

You will need \_\_\_\_\_ cubic inches of packing material.

11. You buy a small music box shaped like a rectangular prism that is packed in a box that is 5 inches high, 4 inches wide, and 4 inches long. If you send it to a friend in a box that is 6 inches high, 7 inches wide, and 8 inches long, how much packing material will you need?

You will need \_\_\_\_\_ cubic inches.

12. What is the volume of a crate, shaped like a rectangular prism, that measures 15 inches high, 15 inches wide, and 18 inches long?

The volume is \_\_\_\_\_.

13. You want to buy enough sand to fill a rectangular sandbox halfway. The sand box is 4 feet long, 3 feet wide, and 1 foot high. How much sand is needed to fill it halfway?

You will need \_\_\_\_\_ of sand.

14. The volume of a rectangular prism is 90 cubic inches, the length is 6 inches, and the width is 5 inches. What is the height?

The height is \_\_\_\_\_.

15. Describe what a cubic inch looks like.

\_\_\_\_\_

16. What is the difference between volume and area?

\_\_\_\_\_  
\_\_\_\_\_