

5.MD.5 — Finding Volume of Rectangular Prisms

Word Problems • Grade 5 • CCSS 5.MD.5

Name: _____

Date: _____

Read each word problem carefully, then use $V = l \times w \times h$ or $V = b \times h$ to find the volume.

1. A fish tank is 12 inches long, 6 inches wide, and 8 inches tall. What is the volume of the fish tank?

2. A moving box is 3 feet long, 2 feet wide, and 4 feet tall. What is the volume of the moving box?

3. A classroom is 30 feet long, 25 feet wide, and 10 feet tall. What is the volume of the classroom?

4. A brick measures 8 inches long, 4 inches wide, and 3 inches tall. What is the volume of the brick?

5. A swimming pool is 20 meters long, 10 meters wide, and 2 meters deep. What is the volume of the pool?

6. A cereal box is 9 inches tall, and its base has an area of 15 square inches. What is the volume of the cereal box?

7. A storage shed is 8 feet long, 6 feet wide, and 7 feet tall. What is the volume of the storage shed?

8. A gift box is 5 inches long, 5 inches wide, and 5 inches tall. What is the volume of the gift box?

9. A sandbox is 6 feet long, 4 feet wide, and 1 foot deep. What is the volume of sand needed to fill it completely?

10. A refrigerator compartment is 2 feet wide, 3 feet long, and 5 feet tall. What is the volume inside the refrigerator?

11. A rectangular garden bed is 9 feet long, 3 feet wide, and 2 feet deep. How much soil is needed to fill the garden bed?

12. A shipping container is 40 feet long, 8 feet wide, and 9 feet tall. What is the volume of the shipping container?

13. A juice box has a base area of 6 square centimeters and is 12 centimeters tall. What is the volume of the juice box?

14. A wooden block is 7 centimeters long, 4 centimeters wide, and 3 centimeters tall. What is the volume of the wooden block?

15. A room is being filled with boxes. The room is 15 feet long, 12 feet wide, and 8 feet tall. What is the total volume of the room?

16. An aquarium display case is 5 feet long, 2 feet wide, and 4 feet tall. What is the volume of the display case?

17. A rectangular water tank is 11 meters long, 5 meters wide, and 4 meters deep. What is the volume of the water tank?

18. A toy chest has a base area of 18 square feet and a height of 3 feet. What is the volume of the toy chest?
19. A block of cheese is 10 centimeters long, 8 centimeters wide, and 6 centimeters tall. What is the volume of the block of cheese?
20. A planter box on a balcony is 4 feet long, 2 feet wide, and 3 feet deep. What is the volume of the planter box?
21. A library book return bin is 2 feet wide, 3 feet long, and 4 feet tall. What is the volume of the book return bin?
22. A rectangular ice block used at a party is 18 inches long, 10 inches wide, and 5 inches tall. What is the volume of the ice block?

Answer Key

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|---------------------|--------------------------|---------------------------|
| 1. 576 cubic inches | 9. 24 cubic feet | 17. 220 cubic meters |
| 2. 24 cubic feet | 10. 30 cubic feet | 18. 54 cubic feet |
| 3. 7,500 cubic feet | 11. 54 cubic feet | 19. 480 cubic centimeters |
| 4. 96 cubic inches | 12. 2,880 cubic feet | 20. 24 cubic feet |
| 5. 400 cubic meters | 13. 72 cubic centimeters | 21. 24 cubic feet |
| 6. 135 cubic inches | 14. 84 cubic centimeters | 22. 900 cubic inches |
| 7. 336 cubic feet | 15. 1,440 cubic feet | |
| 8. 125 cubic inches | 16. 40 cubic feet | |