

5.MD.5 — Finding Volume of Rectangular Prisms

Measurement • Grade 5 • Word Problems • Set C • 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 gym is 14 feet long, 18 feet wide, and 12 feet tall. What is the volume of the gym?

2. A planter box is 20 feet long, 9 feet wide, and 2 feet deep. How much soil is needed to fill it completely?

3. A wooden block is 5 centimeters long, 6 centimeters wide, and 7 centimeters tall. What is the volume of the wooden block?

4. A block of cheese has a base area of 42 square centimeters and a height of 9 centimeters. What is the volume of the block of cheese?

5. A gym is 25 feet long, 25 feet wide, and 8 feet tall. What is the volume of the gym?

6. A planter box is 20 feet long, 8 feet wide, and 2 feet deep. How much soil is needed to fill it completely?

7. A ice block is 15 inches long, 7 inches wide, and 3 inches tall. What is the volume of the ice block?

8. A shipping container has a base area of 18 square feet and a height of 12 feet. What is the volume of the shipping container?

9. A garage is 31 feet long, 18 feet wide, and 9 feet tall. What is the volume of the garage?

10. A water tank is 20 meters long, 3 meters wide, and 3 meters deep. How much water is needed to fill it completely?

11. A aquarium display case is 11 feet long, 6 feet wide, and 2 feet tall. What is the volume of the aquarium display case?

12. A fish tank has a base area of 80 square inches and a height of 6 inches. What is the volume of the fish tank?

13. A garage is 30 feet long, 17 feet wide, and 8 feet tall. What is the volume of the garage?

14. A sandbox is 8 feet long, 9 feet wide, and 4 feet deep. How much sand is needed to fill it completely?

15. A shipping container is 11 feet long, 6 feet wide, and 4 feet tall. What is the volume of the shipping container?

16. A planter box has a base area of 76 square feet and a height of 9 feet. What is the volume of the planter box?

17. A classroom is 15 feet long, 16 feet wide, and 9 feet tall. What is the volume of the classroom?

18. A planter box is 18 feet long, 2 feet wide, and 2 feet deep. How much soil is needed to fill it completely?

19. A fish tank is 18 inches long, 4 inches wide, and 4 inches tall. What is the volume of the fish tank?

20. A aquarium display case has a base area of 34 square feet and a height of 2 feet. What is the volume of the aquarium display case?

21. A storage room is 23 feet long, 9 feet wide, and 11 feet tall. What is the volume of the storage room?

22. A water tank is 7 meters long, 7 meters wide, and 3 meters deep. How much water is needed to fill it completely?

Answer Key

5.MD.5 — Finding Volume of Rectangular Prisms — Set C

- | | | |
|--------------------------|----------------------|----------------------|
| 1. 3,024 cubic feet | 9. 5,022 cubic feet | 17. 2,160 cubic feet |
| 2. 360 cubic feet | 10. 180 cubic meters | 18. 72 cubic feet |
| 3. 210 cubic centimeters | 11. 132 cubic feet | 19. 288 cubic inches |
| 4. 378 cubic centimeters | 12. 480 cubic inches | 20. 68 cubic feet |
| 5. 5,000 cubic feet | 13. 4,080 cubic feet | 21. 2,277 cubic feet |
| 6. 320 cubic feet | 14. 288 cubic feet | 22. 147 cubic meters |
| 7. 315 cubic inches | 15. 264 cubic feet | |
| 8. 216 cubic feet | 16. 684 cubic feet | |