

5.MD.5 — Finding Volume of Rectangular Prisms

Measurement • Grade 5 • Word Problems • Set B • 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 32 feet long, 13 feet wide, and 11 feet tall. What is the volume of the gym?

2. A swimming pool has a base area of 48 square meters and a height of 12 meters. What is the volume of the swimming pool?

3. A gift box is 19 inches long, 4 inches wide, and 7 inches tall. What is the volume of the gift box?

4. A water tank is 20 meters long, 6 meters wide, and 3 meters deep. How much water is needed to fill it completely?

5. A classroom is 12 feet long, 22 feet wide, and 8 feet tall. What is the volume of the classroom?

6. A brick has a base area of 56 square inches and a height of 8 inches. What is the volume of the brick?

7. A toy chest is 15 feet long, 6 feet wide, and 6 feet tall. What is the volume of the toy chest?

8. A sandbox is 6 feet long, 3 feet wide, and 1 foot deep. How much sand is needed to fill it completely?

9. A garage is 20 feet long, 11 feet wide, and 12 feet tall. What is the volume of the garage?

10. A fish tank has a base area of 56 square inches and a height of 12 inches. What is the volume of the fish tank?

11. A shipping container is 16 feet long, 6 feet wide, and 8 feet tall. What is the volume of the shipping container?

12. A planter box is 19 feet long, 10 feet wide, and 2 feet deep. How much soil is needed to fill it completely?

13. A gym is 36 feet long, 9 feet wide, and 9 feet tall. What is the volume of the gym?

14. A moving box has a base area of 52 square feet and a height of 3 feet. What is the volume of the moving box?

15. A aquarium display case is 19 feet long, 10 feet wide, and 9 feet tall. What is the volume of the aquarium display case?

16. A sandbox is 17 feet long, 6 feet wide, and 4 feet deep. How much sand is needed to fill it completely?

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

18. A block of cheese has a base area of 28 square centimeters and a height of 5 centimeters. What is the volume of the block of cheese?

19. A shipping container is 18 feet long, 3 feet wide, and 3 feet tall. What is the volume of the shipping container?

20. A planter box is 10 feet long, 2 feet wide, and 3 feet deep. How much soil is needed to fill it completely?

21. A gym is 34 feet long, 12 feet wide, and 10 feet tall. What is the volume of the gym?

22. A block of cheese has a base area of 100 square centimeters and a height of 2 centimeters. What is the volume of the block of cheese?

Answer Key

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

- | | | |
|---------------------|----------------------|---------------------------|
| 1. 4,576 cubic feet | 9. 2,640 cubic feet | 17. 4,080 cubic feet |
| 2. 576 cubic meters | 10. 672 cubic inches | 18. 140 cubic centimeters |
| 3. 532 cubic inches | 11. 768 cubic feet | 19. 162 cubic feet |
| 4. 360 cubic meters | 12. 380 cubic feet | 20. 60 cubic feet |
| 5. 2,112 cubic feet | 13. 2,916 cubic feet | 21. 4,080 cubic feet |
| 6. 448 cubic inches | 14. 156 cubic feet | 22. 200 cubic centimeters |
| 7. 540 cubic feet | 15. 1,710 cubic feet | |
| 8. 18 cubic feet | 16. 408 cubic feet | |