

Volume of Rectangular Prisms

5.MD.C.3

5.MD.C.4

5.MD.C.5

Name _____ Date _____

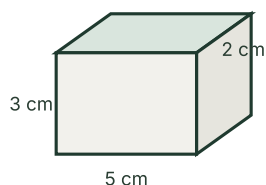
Find each volume by counting unit cubes or using $V = l \times w \times h$ (also written $V = B \times h$). Write cubic units in every answer.

- Find the volume of the rectangular prism by counting unit cubes.

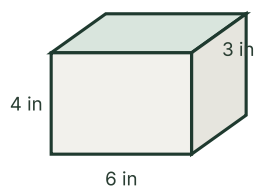


unit cubes

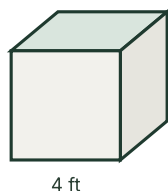
- Find the volume of the rectangular prism.



- Find the volume of the rectangular prism.



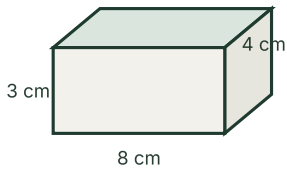
- Find the volume of a cube whose edges each measure 4 feet.



5. A rectangular prism has length 7 m, width 2 m, and height 5 m. Find its volume.

6. A rectangular prism has a base area of 24 square cm and a height of 5 cm. Use $V = B \times h$ to find its volume.

7. Find the volume of the rectangular prism.



8. Which expression gives the volume of a rectangular prism with length l , width w , and height h ?

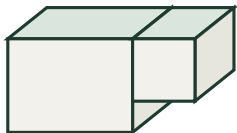
A) $l + w + h$

B) $2(l + w + h)$

C) $l \times w \times h$

D) $2lw + 2lh + 2wh$

9. Two rectangular prisms are joined to make this solid. The larger prism measures $4 \times 2 \times 3$ units and the smaller prism measures $2 \times 2 \times 3$ units. Find the total volume.



10. A rectangular prism has a volume of 60 cubic cm. Its length is 5 cm and its width is 3 cm. What is its height?
11. A fish tank shaped like a rectangular prism is 20 in long, 10 in wide, and 12 in tall. What is the volume of the tank?
12. A storage box is 6 ft long, 4 ft wide, and 3 ft tall. It is filled with cardboard cubes that are each 1 cubic foot. How many cubes fit inside the box?
13. A swimming pool is shaped like a rectangular prism, 25 m long, 10 m wide, and 2 m deep. How many cubic meters of water does it hold when full?
14. A gift box is 8 cm long, 5 cm wide, and 4 cm tall. A larger box is 8 cm long, 5 cm wide, and 8 cm tall. How much greater is the volume of the larger box?