

3 Develop the Concept

3 Independent Practice

Remind students to use the formulas $V = \ell \times w \times h$ or $V = B \times h$ to find the volume of each rectangular prism. Use Exercise 13 as an example. *What formula should you use to find the volume of this prism?* [$V = B \times h$]

Problem Solving

Exercise	Content
16	Multiplication (64×9)
17	Division ($64 \div 7$) Interpret Remainders
18	Division ($50 \div 4$)
19	Estimate Volume ($7 \times 4 \times 3$)
20	Write Fractions
21	Perimeter ($16 + 11 + 20 + 9$)
22	Describe Relationships Mathematically
23	Communicate Math Understanding Mental Addition ($5.95 + 1.05 + 4.25$)
24	Estimate Volume ($5 \times 2 \times 2$)
25	Volume ($3 \times 6 \times 4$)
26	Evaluate Expressions (3×20) - 17

Students use underlying processes and mathematical tools for Exercises 16–26. Remind students to check for reasonableness when solving each problem.

Exercise 20

Language of Math: Identify Relationships Remind students that 3 out of 9 can be written as $\frac{3}{9}$ and simplified to $\frac{1}{3}$.

Exercise 25

Test-Taking Tip: Make Smart Choices Encourage students to eliminate wrong answers. *How do you find volume?* [$\ell \times w \times h$] *Which is the only answer that shows three numbers multiplied together?* [Choice A]

Independent Practice

For 13 through 15, find the volume of each rectangular prism.

13. Base area: 56 in^2
height: 5 in.
280 in³

14. Base area: 100 ft^2
height: 17 ft
1,700 ft³

15. Base area: 72 yd^2
height: 8 yd
576 yd³

Problem Solving

For 16 through 18, use the information below.

Sixty-four students are planning a field trip to the Art Museum. Each student will pay \$9. Each van can hold 7 students and 1 driver.

16. How much money will be collected if all the students attend?
\$576

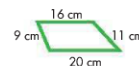
18. The school pays each driver \$50 to drive the van. If the round trip takes 4 hours, how much does each driver make per hour?
\$12.50

20. Only 3 students per event can win medals at the track meet. If 9 students are competing in an event, what fraction of the students will win a medal?
 $\frac{1}{3}$

17. How many vans will be needed if all the students travel to the museum?
10 vans

19. **Estimation** A rectangular prism measures 6.7 in. by 4.2 in. by 2.5 in. Round each measure to the nearest whole number to estimate the volume.
About 84 in³

21. What is the perimeter of this figure?



56 cm

22. **Algebra** Last week 22 people worked a total of 1,100 hours. Each person worked the same number of hours. Which equation represents this information?
A $1,100h = 22$ C $h \div 1,100 = 22$
B $22 \div h = 1,100$ D $22h = 1,100$

24. **Estimation** Lisa and Ranjan are going on a trip. The trunk they are using is 4.5 feet wide, 1.75 feet high, and 2 feet deep. What is the estimated volume of the trunk?
About 20 ft³

26. **Algebra** Find $3c - 17$ if $c = 20$.
43

23. **Writing to Explain** Harry is in line at the store. He has 3 items that cost \$5.95, \$4.25, and \$1.05. Explain how Harry can add the cost of the items mentally before he pays for them.
See margin.

25. **Think About the Process** Which expression can be used to find the volume of this antique box?



A $(6 \times 4) \times 3$

C 6×4

B $(6 \times 4) + 3$

D $2 \times (6 \times 4 \times 2)$

334

23. Sample answer: First add the compatible numbers $\$5.95 + \$1.05 = \$7$. Then add $\$7 + \$4.25 = \$11.25$.