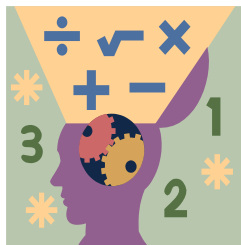


Name: _____ Section: _____



Homework

Greetings Scholars and Parents. This week we'll be working on finishing up chapter 15, involving Volume. We'll be exploring new formulas and a challenging yet exciting topic – volume of composite figures.

Extra Practice – OPTIONAL THIS WEEK

Additional practice for the daily lessons is available on IXL. To access extra practice, please have your child login into IXL. Under the **“FROM YOUR TEACHER”** section, scholars will find Teacher Assigned Lessons. From there, you will see a list of lessons reinforcing the daily skills.

- Volume of rectangular prisms made of unit cubes I
- Volume of rectangular prisms made of unit cubes II
- Volume of irregular figures made of unit cubes
- Volume of rectangular prisms made of unit cubes: word problems
- Volume of cubes and rectangular prisms
- Volume of compound figures

Notes

Completed homework packets should be uploaded or turned in on **Sunday, January 25th**. Students must prove and show all their work in the provide space. Scholars should use a separate sheet of paper if they need additional space. Failure to show work or packets submitted after the due date will result in a lower grade. If a scholar struggles with a lesson, they can review the daily lesson on HMH. Please feel free to contact me with any questions or concerns at peter.vanegas@archimedean.org.

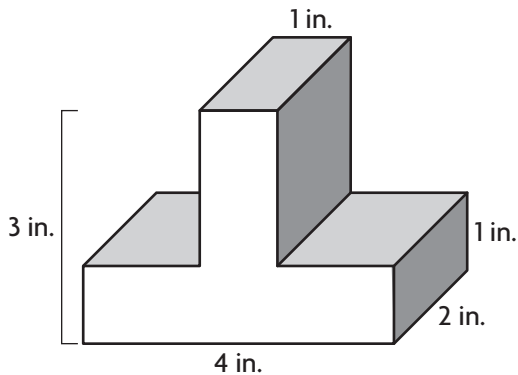
<u>Monday</u>	January 19 th	– MLK DAY
<u>Tuesday</u>	January 20 th	– Complete IXLs: TFL, QMA
<u>Wednesday</u>	January 21 st	- 15.6
<u>Thursday</u>	January 22 nd	- 15.5
<u>Friday</u>	January 23 rd	- Study Guide: Volume

Find Volume of Composed Figures

[Go Online](#)
[Interactive Examples](#)

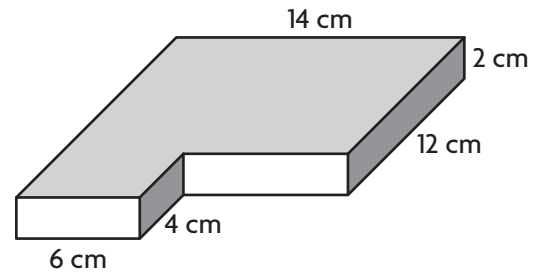
Find the volume of the composite figure.

1.



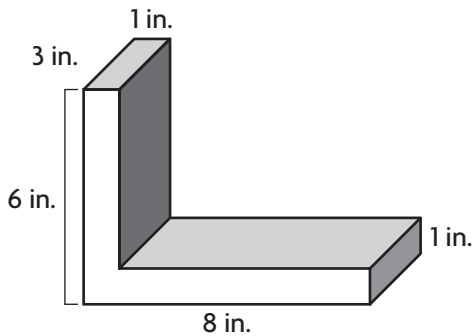
$V = \underline{\hspace{2cm}}$

2.



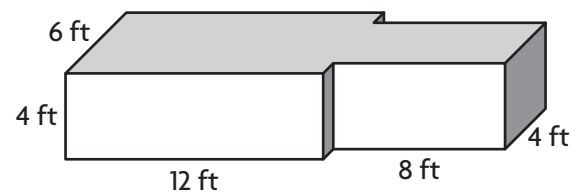
$V = \underline{\hspace{2cm}}$

3.



$V = \underline{\hspace{2cm}}$

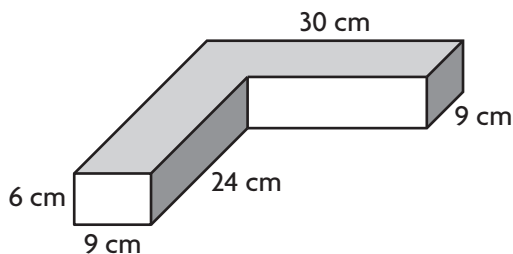
4.



$V = \underline{\hspace{2cm}}$

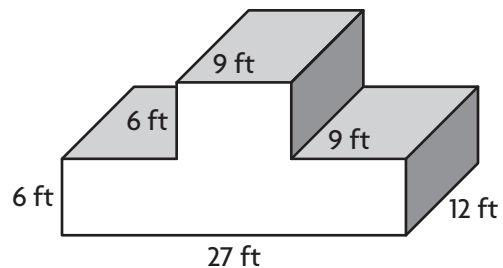
Problem Solving

5. As part of her shop class, Jules made the figure below out of pieces of wood. How much space does the figure she made take up?



$V = \underline{\hspace{2cm}}$

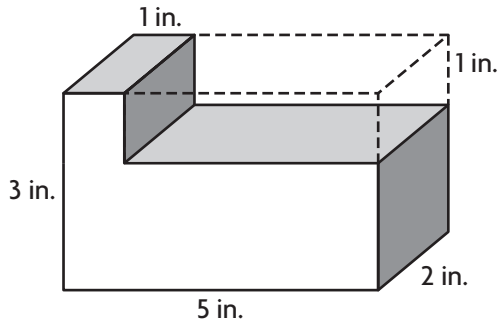
6. What is the volume of the composite figure below?



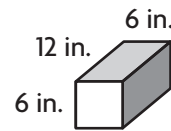
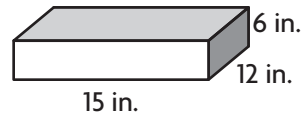
$V = \underline{\hspace{2cm}}$

Lesson Check

7. Write an expression to represent the volume of the composite figure.



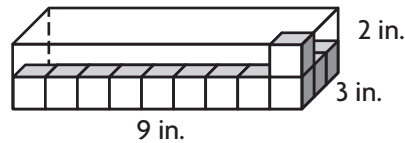
8. Suppose you take the small prism and stack it on top of the larger prism. What will be the volume of the composite figure?



Spiral Review

9. Jesse wants to build a wooden chest with a volume of 8,100 cubic inches. The length will be 30 inches and the width will be 15 inches. How tall will Jesse's chest be?

10. What is the volume of the rectangular prism?



11. Adrian's recipe for cranberry relish calls for $1\frac{3}{4}$ cups of sugar. He wants to use $\frac{1}{2}$ that amount. How much sugar should he use?

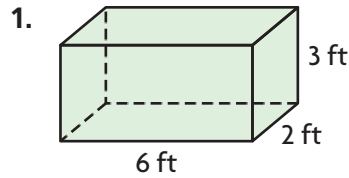
12. Joanna has a board that is 6 feet long. She cuts it into pieces that are each $\frac{1}{4}$ foot long. Write an equation to represent the number of pieces she cut.

Apply Volume Formulas

Go Online

Interactive Examples

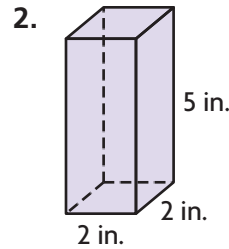
Find the volume.



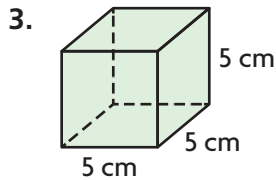
$$V = \underline{\quad l \quad} \times \underline{\quad w \quad} \times \underline{\quad h \quad}$$

$$V = \underline{\quad 6 \quad} \times \underline{\quad 2 \quad} \times \underline{\quad 3 \quad}$$

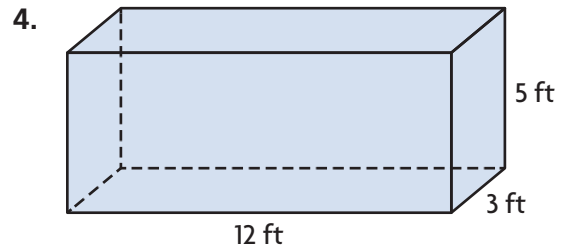
$$V = \underline{\quad 36 \text{ cu ft} \quad}$$



$$V = \underline{\hspace{2cm}}$$



$$V = \underline{\hspace{2cm}}$$




$$V = \underline{\hspace{2cm}}$$

Problem Solving

5. A construction company is digging a hole for a swimming pool. The hole will be 12 yards long, 7 yards wide, and 3 yards deep. How many cubic yards of dirt will the company need to remove?

6. Andrea rents a storage room that is 15 feet long, 5 feet wide, and 8 feet high. What is the volume of the storage room?

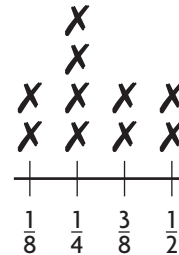
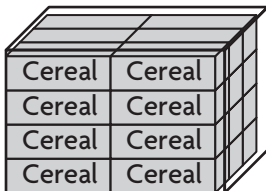
7.  **WRITE** *Math* Explain how you would find the height of a rectangular prism if you know that the volume is 60 cubic centimeters and that the area of the base is 10 square centimeters.

Lesson Check

8. Sayeed is buying a crate for his puppy. The crate is 20 inches long, 13 inches wide, and 16 inches high. What is the volume of the crate?
9. Carmen has a gift box in the shape of a cube. Each side of the box measures 15 centimeters. What is the volume of the gift box?

Spiral Review

10. Max packs cereal boxes into a larger box. The volume of each cereal box is 175 cubic inches. About what is the volume of the large box?
11. In health class, students record the weights of the sandwiches they have for lunch. The weights are shown in the line plot below. What is the average weight of one sandwich?



**Weights of Sandwiches
(in pounds)**

12. Cleo has 20 unit cubes. How many different rectangular prisms can she build with the cubes?
13. Darnell went to the movies with his friends. The movie started at 2:35 p.m. and lasted 1 hour 45 minutes. What time did the movie end?