

Objective Volume Composition and Decomposition

Warm-Up



Calculate each product.

1. 0.4×0.03 Sample worked out



$$\begin{array}{r}
 1 \\
 0.4 \leftarrow \text{There is } 1 \text{ decimal} \\
 \times 0.03 \leftarrow \text{There is } 2 \text{ decimal} \\
 \hline
 0.012 \leftarrow \text{Total of } 3 \text{ decimal place to put back}
 \end{array}$$

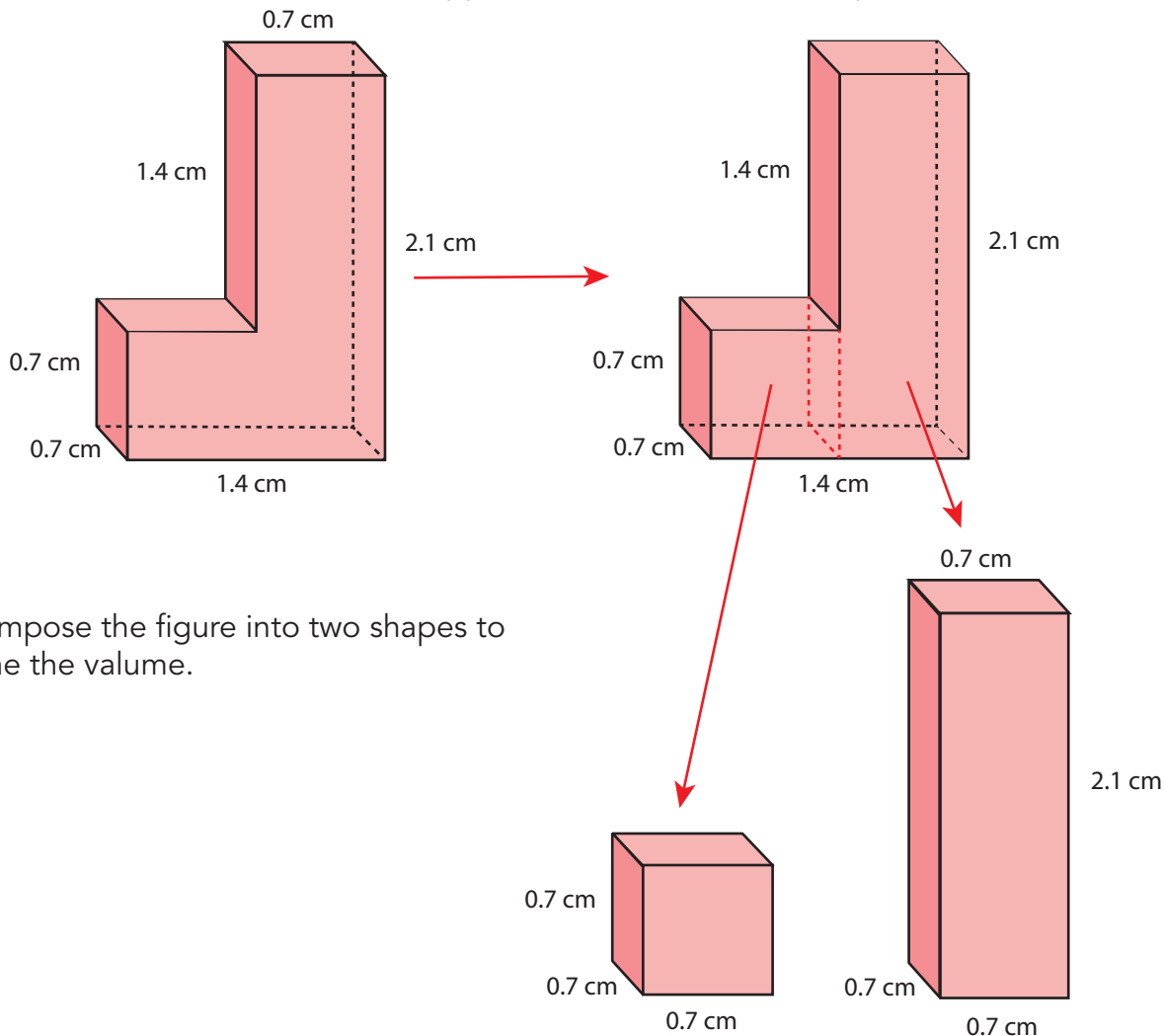
2. 0.9×0.07

3. 0.2×0.05

4. 0.05×0.6



You have seen that you can add, subtract, and of course multiply positive rational numbers, like decimals, to determine volumes. Let's apply what you know to solve problems.



1. Decompose the figure into two shapes to determine the volume.

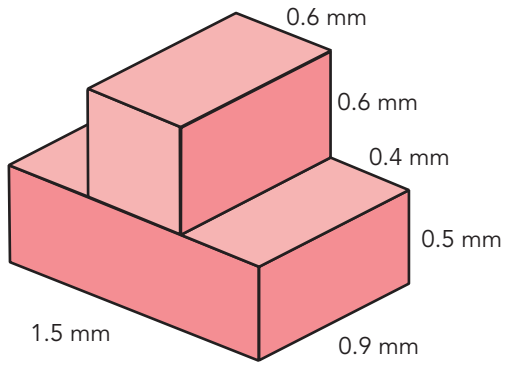
a. Calculate the volume of **Small Rectangle**

b. Calculate the volume of **Large Rectangle**

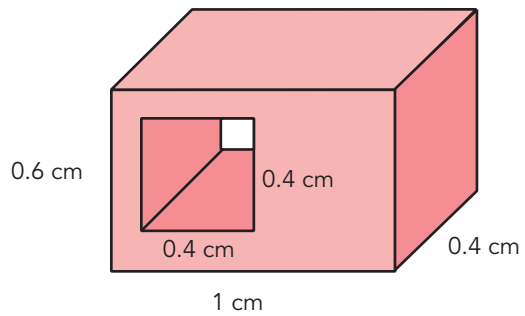
2. Determine the total volume of the figure you decomposed.

3. Calculate the volume of each figure. Show your work.

a.



b.

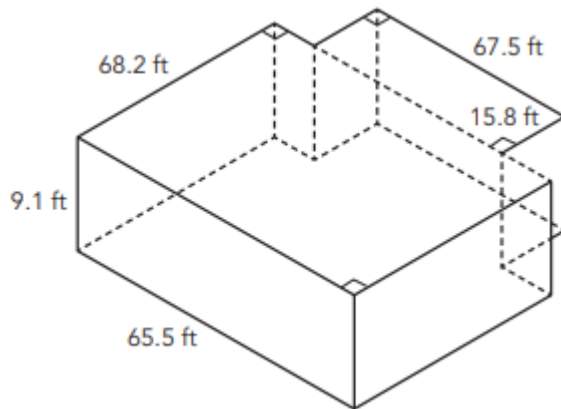


Show You Know

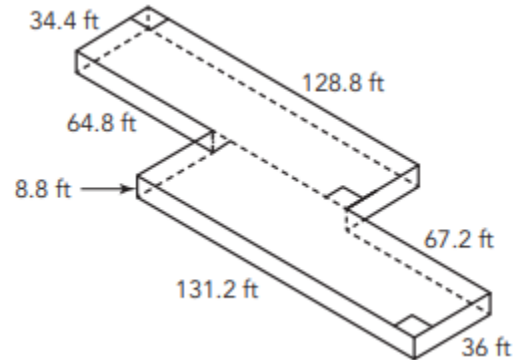
The Volume Warehouse

A business is shopping for warehouse space. Two of their choices are shown.

Warehouse A



Warehouse B



The total cost each month for space in Warehouse A is \$0.25 times the number of cubic feet used. The total cost each month for space in Warehouse B is \$0.15 times the number of cubic feet used.

1. Which warehouse space would you recommend? What information would you need to make this decision? Write your findings in a report to your Director of Finance.



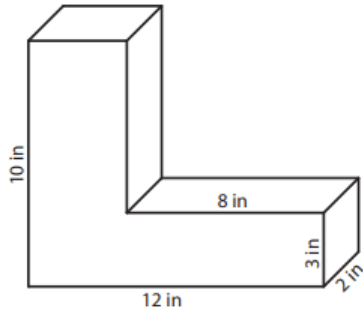
LESSON 3.2b Which Warehouse?



Objective Volume Composition and Decomposition

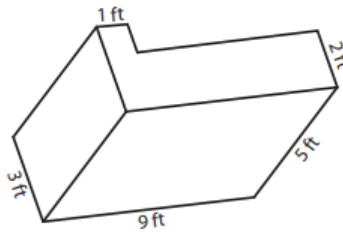
Find the volume of each L - block.

1)



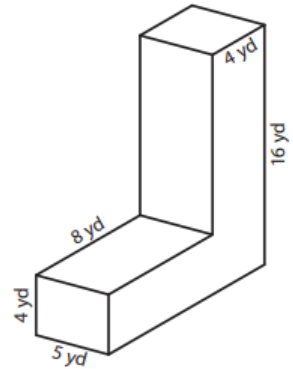
Volume = _____

2)



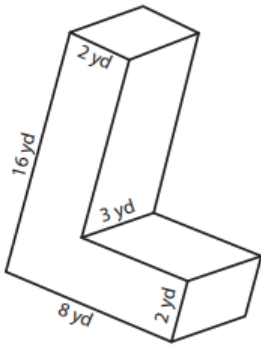
Volume = _____

3)



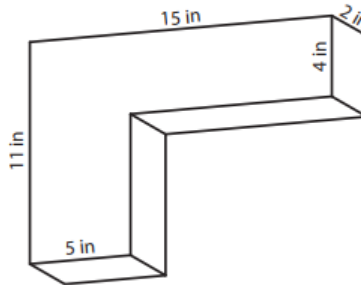
Volume = _____

4)



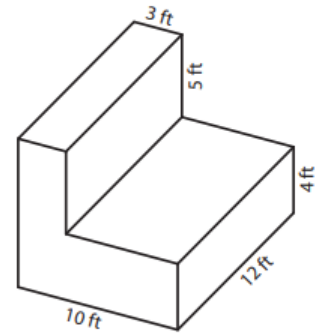
Volume = _____

5)



Volume = _____

6)



Volume = _____

