

Luke
Paulus
2/19/2020
Mrs. Joshi

CDC Writing

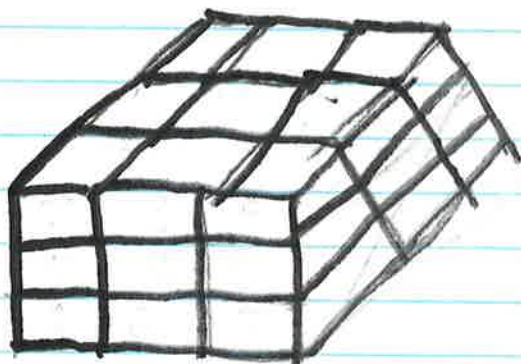
Question: Michael says to find the volume of a rectangular prism you just count the cubes. Sam says you use the formula $l \times w \times h$ to find the volume. Who is correct? Explain your reasoning.

Claim: Both Michael and Sam are correct. Each of them are just using different methods of finding volume.

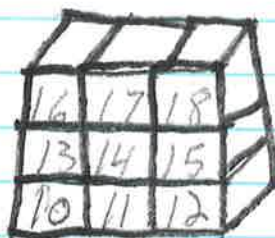
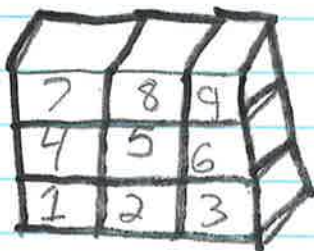
Data:

Example

Michael's
Method



First
Layer



Second
Layer

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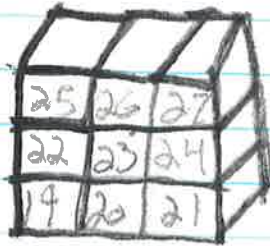
CDC Writing

Data:

Example

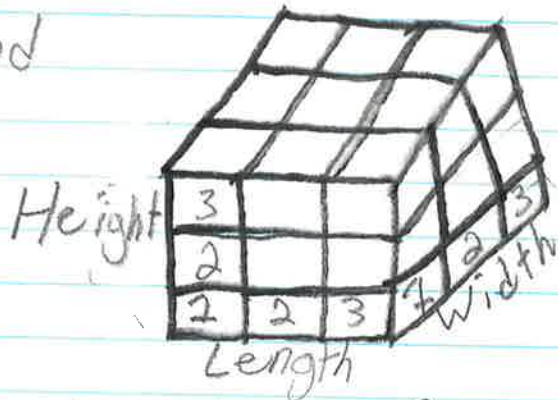
Michael's
Method
(continued)

Third
Layer



Total Cube =
27 unit³

Sam's
Method



$$\text{Volume} = l \times w \times h \\ 3 \times 3 \times 3$$

$$3 \times 3 = 9 \\ 9 \times 3 = \underline{27 \text{ unit}^3}$$

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Commentary: When Michael and Sam both got the same answer it showed that they just used different methods and both are correct. What Michael did was break up the cube. He then counted all of the cubes individually. This is a working method on finding volume. Sam used the formula $l \times w \times h$ to find volume. He first would find the number of cubes on the length. Then he would find the number of cubes on the width and height. Finally he would multiply them all together like the formula says. This also is a working method to find volume. So Sam and Michael are both correct and are only using different methods to find volume which is the amount of space that a 3-D object takes up.