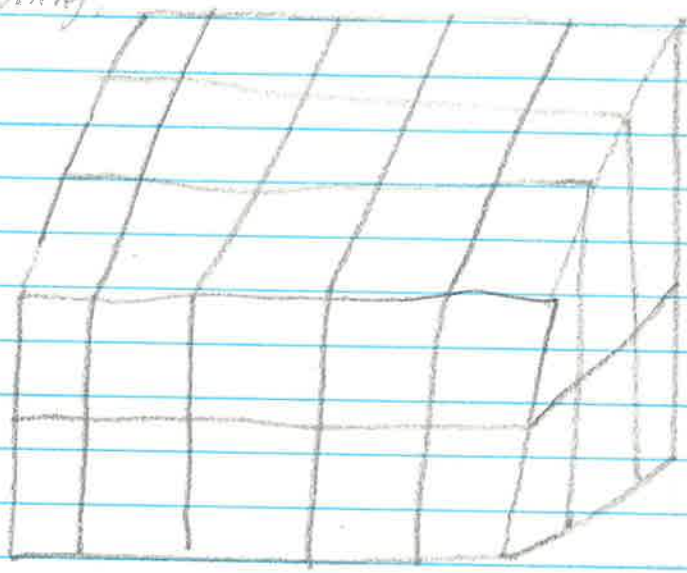
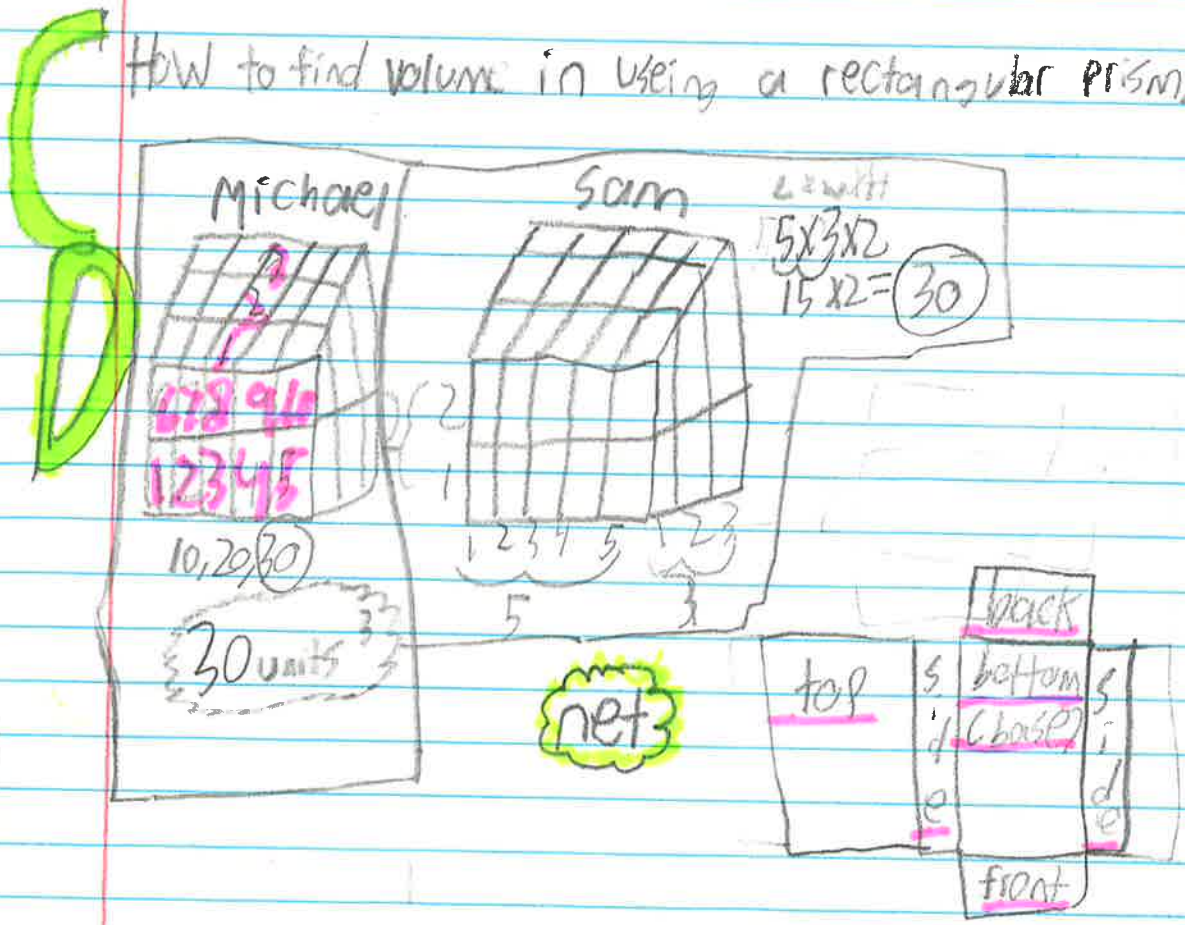
CPC Volume

Ashton Bullard

Michael says to find the volume of a rectangular prism you just count the cubes. Sam says you use the formula LxWxH to find the volume. Who is correct? Explain your reasoning.



How to find volume in using a rectangular prism.



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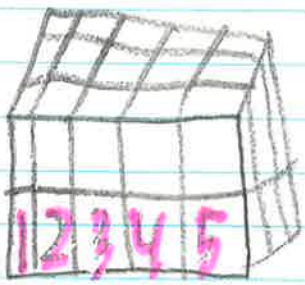
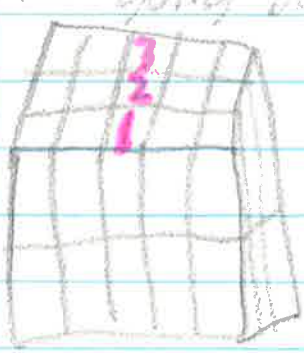
First Michael said you could just count the cubes. He is correct you can just count the cubes. In this case there are 10 cubes in the front. You can do either 10x3, because the rectangular prism has a depth of 3 cubes. Or you can count all the cubes in the front, and then you go back a row and count all of those cubes. Go back as many cubes as the depth is. In this case it is 3. So you would count 3 rows of 10. Both ways are correct.

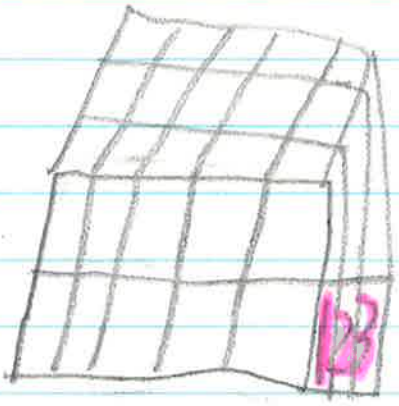
That is how Michael said you can count the cubes. He is correct, but Sam is also correct. He said you can use the formula LxWxH to find the volume. He did this. He counted one front row going horizontal.



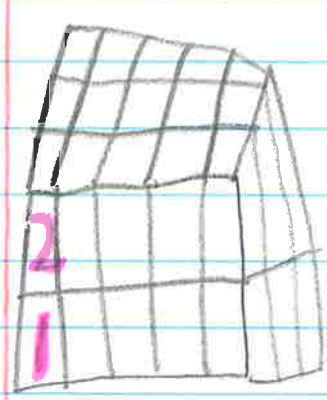
Next he found the delth of the rectangular prism. He counted all the cubes on one row going back.



or



Finally he found the height. He counted all the cube in a row going vertically.



Now that you know your Lenth, delth (width), and height you use the formula LxWxH. You multiply 5x3 to get 15. 15 is your base. Now you do base x height. So you do 15x2 to get a final answer of 30in.^{3} Both methods are correct. You can chose witch one works best for you. Now you know how to find volume of a 3-D shape in two different ways.