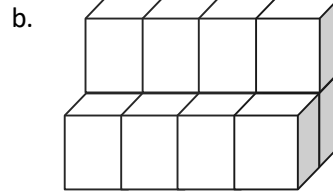
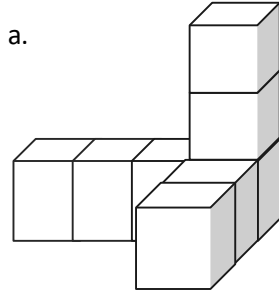


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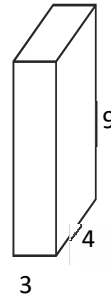
Date _____

1. Tell the volume of each solid figure made of 2-inch cubes. Specify the correct unit of measure.

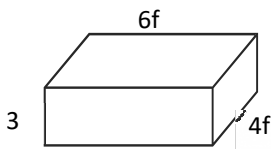


2. James found the volume of the prism pictured to the right by multiplying 9×4 and then adding $36 + 36 + 36 = 108$. He says the volume is 108 cubic inches.

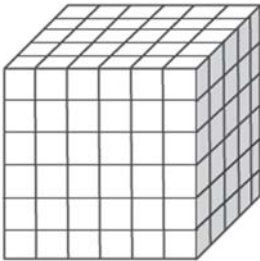
a. Jack says he did it wrong. He should have multiplied the bottom first (4×9) and then multiplied by the height. Explain to James why Jack's method works and is equivalent to his method.



b. Use Jack's method to find the volume of this right rectangular prism.

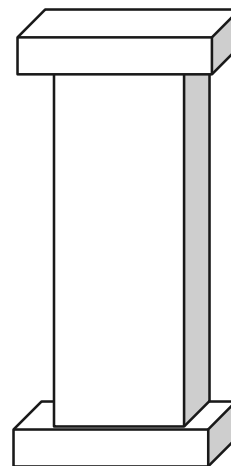


If the figure below is made of cubes with 3 cm side lengths, what is its volume? Explain your thinking.

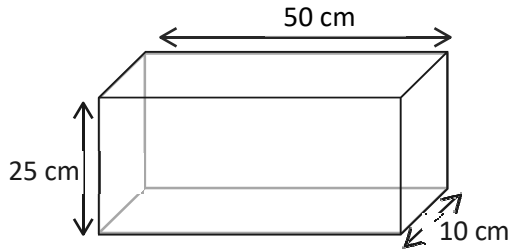


3. The volume of a rectangular prism is 700 in^3 . If the area of the base is 50 in^2 , find its height. Draw and label a model to show your thinking.

4. The following structure is composed of two right rectangular prisms that each measure 13 inches by 11 inches by 6 inches and one right rectangular prism that measures 9 inches by 7 inches by 34 inches. What is the total volume of the structure? Explain your thinking.

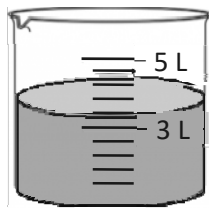


5. a. Find the volume of the rectangular fish tank. Explain your thinking.

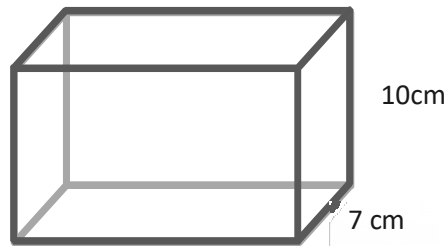


- b. If the fish tank is completely filled with water and then 800 cubic centimeters are poured out, how high will the water be? Give your answer in centimeters, and show your work.

6. Alice wants to know if the chicken broth in this beaker will fit into this rectangular food storage container. Explain how you would figure it out without pouring the contents in. If it will fit, how much more broth could the storage container hold? If it will not fit, how much broth will be left over? (Remember: $1 \text{ cm}^3 = 1 \text{ mL}$.)



Beaker



Storage Container

