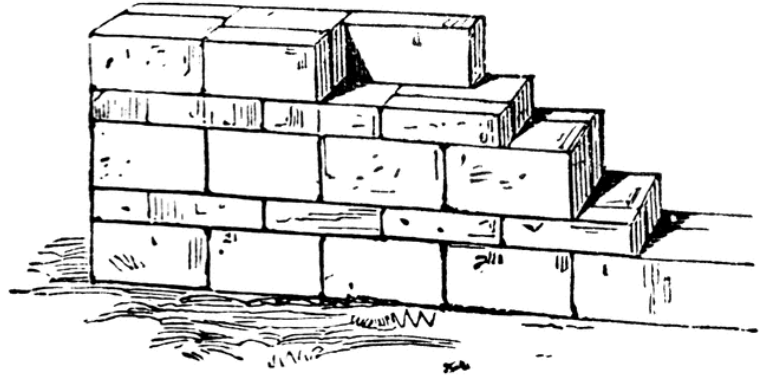


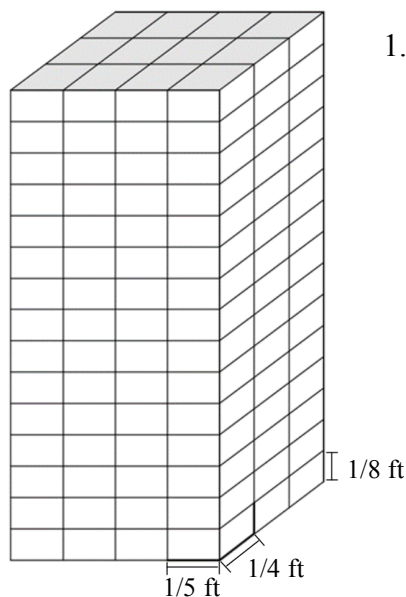
Name _____ Date _____

The standard size of a construction brick is $2\frac{1}{4}$ inches by 8 inches by $3\frac{1}{2}$ inches. Find the volume of one brick and explain how you found your answer.



Name _____ Date _____

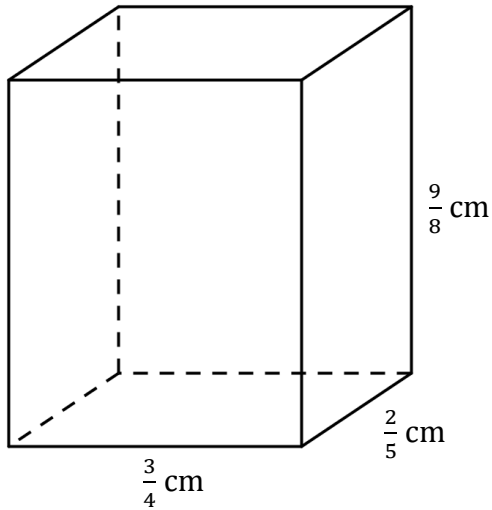
Calculate the volume of a block of modeling clay in two different ways, and explain how the two ways are related.



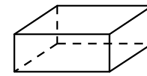
1. A large block of modeling clay was cut into 180 pieces that each measure $\frac{1}{5}$ foot by $\frac{1}{4}$ foot by $\frac{1}{8}$ foot, as shown in the diagram. Use these measurements to calculate the volume of the large block of clay. Explain how you found your answer.
2. Before it was cut, the block of clay measured $\frac{4}{5}$ foot by $\frac{3}{4}$ foot by $\frac{15}{8}$ foot. Use these measurements to calculate the volume of the block of clay. Explain how you found your answer.
3. Consider the methods you used to answer question 1 and question 2. Explain how they are related.

Name _____ Date _____

Imagine that the prism pictured below is packed full of smaller identical prisms. The length of each edge of the small prisms is a **unit fraction**.



1. Give the dimensions of the small prisms that can be used to pack the larger prism.



2. How many of the small prisms would it take to completely fill the larger prism? Explain how you found your answer.
3. Explain how the number of the small prisms needed to fill the larger prism is related to the volume of the large prism.