

Root Beer Problem

You LOVE root beer! Lots and lots of root beer!

PART I

You love root beer so much that you want to construct the largest cylindrical tank that would fit into this classroom. Should the tank go from ceiling to floor, long wall to long wall, or shorter wall to shorter wall? STOP! Make your prediction NOW:

Direction _____ Volume _____

Determine which cylinder would hold the most - record your method and all work. What is that volume? _____



PART II

Using the largest of these cylinders; pretend it is filled with root beer. How many 2-liter bottles could be filled by all of that root beer? STOP! Make your prediction NOW: _____

Determine the number of 2-liter bottles - record all of your work.



How are 2-liter bottles transported to the local store? Find out!

If all the 2-liter bottles of root beer were in their transport cases, would these cases fit into the classroom? STOP! Make your prediction NOW:

YES NO

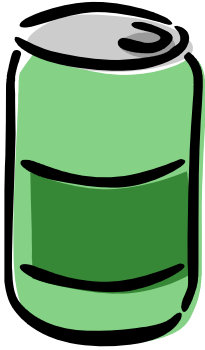
Determine if the cases of bottles would fit into the classroom - record your work.

PART III

Using the largest of these cylinders; pretend it is filled with root beer. How many 12-packs of cans could be filled by all of that root beer? STOP! Make your prediction NOW:

Number of cans _____ Number of 12-packs _____

Determine the number of 12-packs of cans - record all of your work.



How are 12-packs of cans transported to the local store? Find out!

If all the 12-packs of cans were in their transport cases, would these cases fit into the classroom? STOP! Make your prediction NOW:

YES NO

Determine if the cases of 12-packs would fit into the classroom - record your work.

