

Finding the Volume of Willis Tower

Lesson 6-6

DATE

TIME



- 1 What is the approximate volume of Willis Tower?

About 53,578,125 cubic feet

- 2 Describe the strategy your group used to estimate the volume of Willis Tower. Explain your strategy as clearly as you can.

Sample answer: First, we wrote down the length, width, and height for each of the mega-modules. All of them were 75 feet long and 75 feet wide, but the heights were different. Next, we used $V = l * w * h$ to find the volume of each module. We kept track of the volumes in a table so that we knew which ones we had done and which ones we still had left to do. Finally, we added up the 9 separate volumes to find the total.

- 3 Do you think your group could have used a more efficient strategy? Explain at least one way your strategy could have been more efficient.

Sample answer: We calculated $75 * 75$ nine separate times when we found the volume of each mega-module. It would have been more efficient to just do that calculation once and then use it for the rest of the modules.