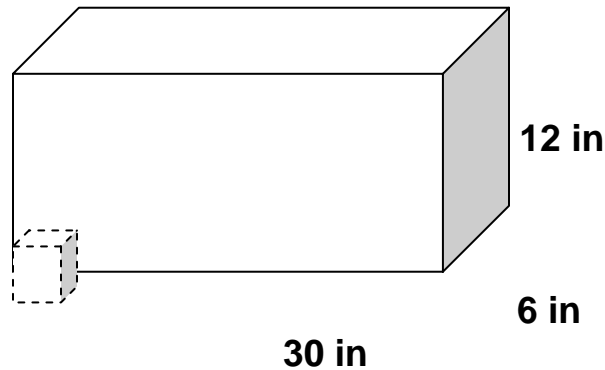


PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** October 30 to November 2**DAY:** Tuesday

RISD Objective: Given a solid figure (including composite figures) and/or a word problem, students will find the volume, applying it as necessary.

PROBLEM #49

Find the volume of the rectangular prism below.



If a box of cereal has dimensions of 5 in x 4 in x 1 in, how many boxes of cereal will fit in the big box? (How much space is left after the cereal boxes have been packed?) Explain your work.

MODEL SOLUTION #49

Volume of large box:

$$30 \cdot 6 \cdot 12$$

$$2160 \text{ cm}^3$$

Volume of one cereal box:

$$5 \cdot 4 \cdot 1 = 20 \text{ cm}^3$$

To find how many cereal boxes fit into the big box, we must divide:

$$2160 \div 20 = 108$$

So, 108 cereal boxes will fit in the big box, with no space left over.