Volume and Stacks

Name_____   Date_____
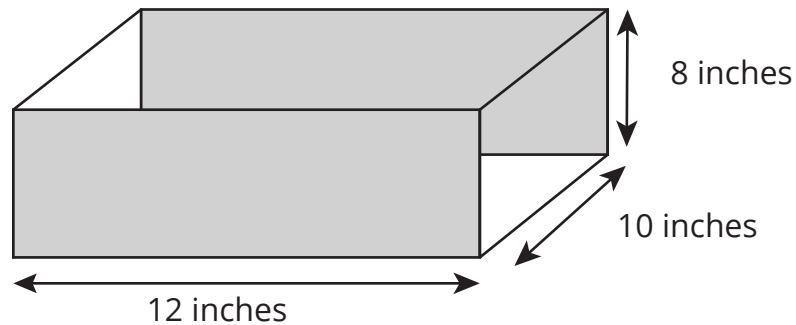
Reference the diagram below and the formula for Volume:

[V = l × w × h] ; V= volume, l = length, w= width, h = height

to answer the following questions.

Stacks Biscuit Bakery Box

8 inches

10 inches

12 inches

A Bit About the Stacks Biscuit Bakery Box:
The Stacks Biscuit Bakery Box was believed to be Betty Branford's best baked goods bin design. It's dimensions were promoted by packers to have been produced with particularly puncture proof paper portraying a 12 x 10 x 8 inch package.

Exercises:

1. What is the volume of a Stacks Biscuit Bakery Box?

   [v = 12 x 10 x 8 = 960 inches^3 or 960 cubic inches]

2. What is the total volume of three Stacks Biscuit Bakery Boxes?

   [v = (12 x 10 x 8) x 3], v = [(12 x 10 x 8) x 3] = [960 x 3 = 2,880 inches^3 or cubic inches]

3. Betty Branford had a bunker behind Stacks Biscuit Bakery built with walls of: 6 boxes long by 6 boxes tall! What was the volume of one of her bunker walls?

   [v = 12 x 10 x 8 = 960 ~~inches~~^{3} or 960 cubic inches] x (6 x 6) = [36 x 960 = 34,560 cubic inches]

Connections:
How are rectangular shapes perfectly suited for multiplication or addition strategies?

ANSWERS MAY VARY