Lesson 6.5 ~ Volume with Fractional Dimensions

Name_____ Period_____ Date_____

Use the formula V = *lwh* to find the volume of a rectangular prism.

1. $l = 1\frac{2}{3}$ units, $w = \frac{1}{3}$ unit, $h = \frac{3}{10}$ unit

2. $l = 2\frac{1}{2}$ meters, $w = 1\frac{1}{5}$ meters, $h = \frac{1}{2}$ meter

3. $l = \frac{9}{10}$ cm, $w = \frac{1}{2}$ cm, $h = 1\frac{1}{4}$ cm

4. $l = 2\frac{1}{4}$ feet, $w = \frac{2}{3}$ foot, $h = 2\frac{1}{3}$ feet

5. A box measured $2\frac{1}{4}$ feet long, $1\frac{2}{3}$ feet wide and $2\frac{1}{2}$ feet tall.
    a. What is the volume of the box?

    b. If a paper company wanted to fill the box with 10 cubic feet of paper, would it fit?

6. A wood shed measured $3\frac{1}{3}$ yards long, $1\frac{5}{9}$ yards wide and $2\frac{1}{4}$ yards tall.
    a. What is the volume of the wood shed?

    b. If Carrie had 10 cubic yards of wood to put in the shed, would it fit?

Measure the lengths and widths of each rectangular prism using inches to the nearest eighth inch. The width is given. Find the volume of each prism.

7.

$\frac{3}{4}$ inch

8.

$\frac{1}{2}$ inch
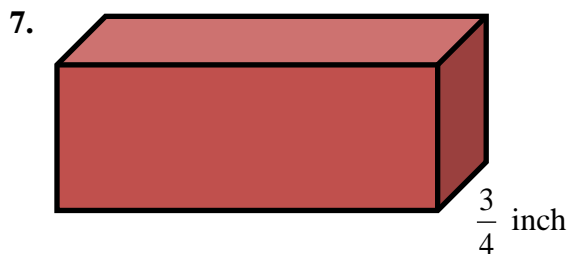
9. Blaire filled a box with popcorn. The box measured $1\frac{1}{4}$ feet long, $\frac{3}{4}$ foot wide and $1\frac{1}{3}$ feet tall. How many cubic feet of popcorn did Blaire use to fill the box?