

Lesson 6.5T ~ Volume with Fractional Dimensions

Name _____ Period _____ Date _____

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

1. $l = \frac{2}{3}$ in, $w = \frac{1}{6}$ in, $h = \frac{3}{4}$ in

a. Substitute each value in the formula: $V = lwh$

$$V = \boxed{} \times \boxed{} \times \boxed{}$$

b. Cross-simplify any numerators and denominators.

c. Solve using simplified fractions.

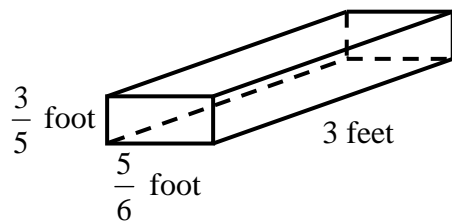
$$V = \boxed{} \times \boxed{} \times \boxed{}$$

d. $V =$ _____ cubic _____

2. $l = \frac{1}{2}$ meter, $w = \frac{4}{5}$ meter, $h = \frac{1}{4}$ meter

Find the volume.

3.



4. $l = 5 \text{ cm}$, $w = 2\frac{2}{5} \text{ cm}$, $h = 1\frac{1}{3} \text{ cm}$

a. Rewrite all mixed or whole numbers as improper fractions.

$$5 = \boxed{} \quad 2\frac{2}{5} = \boxed{} \quad 1\frac{1}{3} = \boxed{}$$

b. Substitute each value in the formula: $V = lwh$

$$V = \boxed{} \times \boxed{} \times \boxed{}$$

c. Cross-simplify any numerators and denominators.

d. Solve using simplified fractions.

$$V = \boxed{} \times \boxed{} \times \boxed{}$$

e. $V = \underline{\hspace{2cm}}$ cubic $\underline{\hspace{2cm}}$

5. $l = 1\frac{1}{2} \text{ ft}$, $w = 2\frac{2}{3} \text{ ft}$, $h = 2\frac{1}{4} \text{ ft}$

Find the volume.

6.

