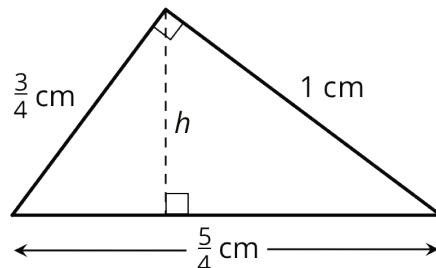


## Lesson 15 Practice Problems

1. A pool in the shape of a rectangular prism is being filled with water. The length and width of the pool is 24 feet and 15 feet. If the height of the water in the pool is  $1\frac{1}{3}$  feet, what is the volume of the water in cubic feet?
2. A rectangular prism measures  $2\frac{2}{5}$  inches by  $3\frac{1}{5}$  inches by 2 inch.
- Priya said, "It takes more cubes with edge length  $\frac{2}{5}$  inch than cubes with edge length  $\frac{1}{5}$  inch to pack the prism." Do you agree with Priya? Explain or show your reasoning.
  - How many cubes with edge length  $\frac{1}{5}$  inch fit in the prism? Show your reasoning.
  - Explain how you can use your answer in the previous question to find the volume of the prism in cubic inches.
3. a. Here is a right triangle. What is its area?
- b. What is the height  $h$  for the base that is  $\frac{5}{4}$  units long? Show your reasoning.

(From Unit 4, Lesson 14.)



4. To give their animals essential minerals and nutrients, farmers and ranchers often have a block of salt—called “salt lick”—available for their animals to lick.

- a. A rancher is ordering a box of cube-shaped salt licks.

The edge lengths of each salt lick are  $\frac{5}{12}$  foot. Is the volume of one salt lick greater or less than 1 cubic foot? Explain your reasoning.



- b. The box that contains the salt lick is  $1\frac{1}{4}$  feet by  $1\frac{2}{3}$  feet by  $\frac{5}{6}$  feet. How many cubes of salt lick fit in the box? Explain or show your reasoning.

5. a. How many groups of  $\frac{1}{3}$  inch are in  $\frac{3}{4}$  inch?

- b. How many inches are in  $1\frac{2}{5}$  groups of  $1\frac{2}{3}$  inches?

(From Unit 4, Lesson 12.)

6. Here is a table that shows the ratio of flour to water in an art paste. Complete the table with values in equivalent ratios.

cups of flour	cups of water
1	$\frac{1}{2}$
4	
	3
$\frac{1}{2}$	

(From Unit 2, Lesson 12.)