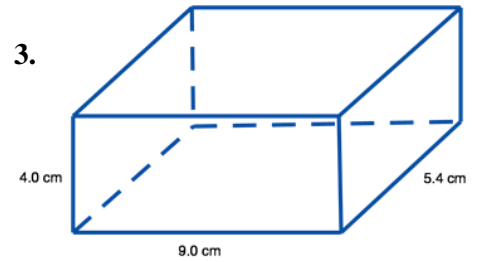
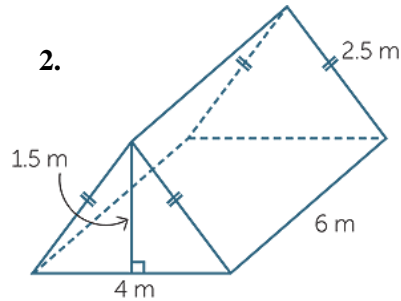
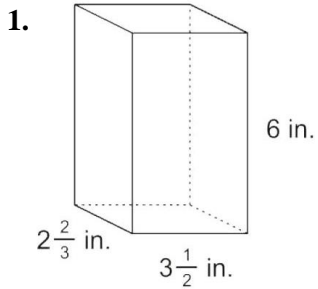
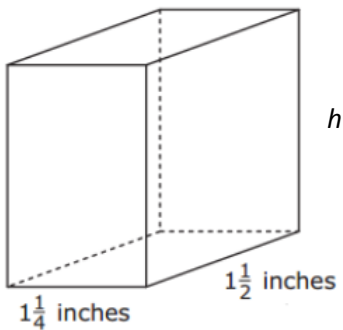


Volume Practice

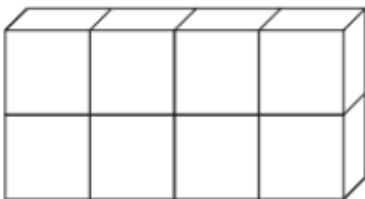
Find the volume of each prism.



4) Find the missing dimension if the volume of the prism is $3\frac{3}{4}$ cubic inches.



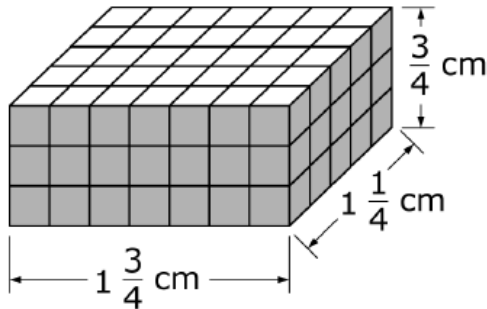
5) The right rectangular prism below is made up of 8 cubes. Each cube has an edge length of $\frac{1}{2}$ inch.



What is the volume of this prism?

- 6) Elizabeth and Virat use small cubes to make the rectangular prism as shown below. The length of each edge of the small cubes is $\frac{1}{4}$ centimeter.

Elizabeth uses a volume formula to find that the volume of the prism is $\frac{27}{8}$ cubic centimeters. Virat decides to count the cubes to find the volume of the prism.



Part A

How many of the small cubes with edge length $\frac{1}{4}$ centimeter does Virat count in the prism?

cubes.

Part B

What is the volume, in cubic centimeters, of one of the small cubes with edge length $\frac{1}{4}$ centimeter? Write the volume as a fraction.

.....

Part C

Using Virat's method, find the prism's volume, in cubic centimeters. Explain how the volume found is the same as the volume found using Elizabeth's method.

- 7) Andy completely filled the container shown below with small cubes that were each $\frac{1}{2}$ inch long. Show how he can calculate the volume of the container using these cubes and instead of the formula.

