

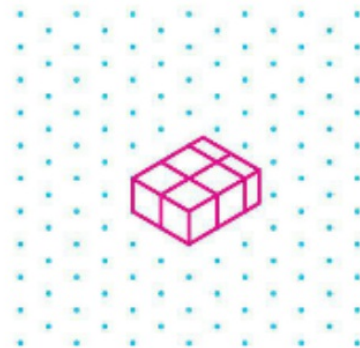
Hands-On Activity 3

You can use cubes of candy to find the volume of rectangular prisms with fractional sides.

Step 1 Cut one piece of candy into two halves.

Step 2 Make a model that is $2\frac{1}{2}$ cubes long, 2 cubes wide, and 1 cube tall. Draw a picture of your model.

Step 3 Count the number of cubes used to build the model. The model uses 4 whole cubes and 2 half-cubes. Two halves equal one whole. So, a total of 5 cubes were used.



So, the volume of the prism is 5 cubic units.

Compare the product of the dimensions of the prism with its volume.

$$\underline{2\frac{1}{2}} \times \underline{2} \times \underline{1} = \underline{5}$$

They are the same.



Model with Mathematics Work with a partner. Use models to determine the volume of each prism. Draw a diagram of each model in the space provided.

1. length: 1
height: 1
width: 1
volume: 1 cubic unit

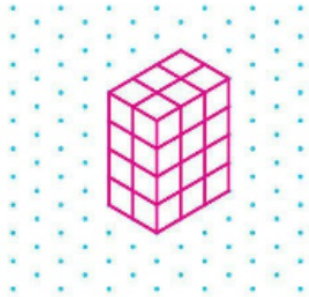
Show your work.



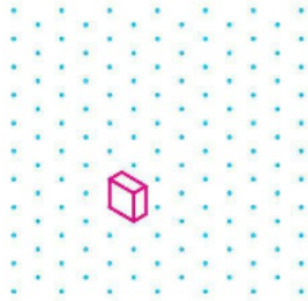
2. length: 2
height: 4
width: 1
volume: 8 cubic units



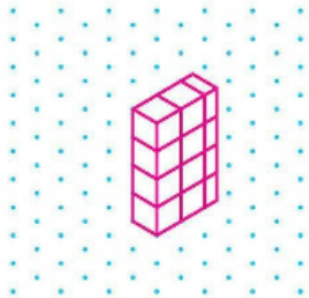
3. length: 3
height: 4
width: 2
volume: 24 cubic units



4. length: $\frac{1}{2}$
height: 1
width: 1
volume: $\frac{1}{2}$ cubic unit



5. length: $2\frac{1}{2}$
height: 4
width: 1
volume: 10 cubic units



6. length: $3\frac{1}{2}$
height: 2
width: 2
volume: 14 cubic units

