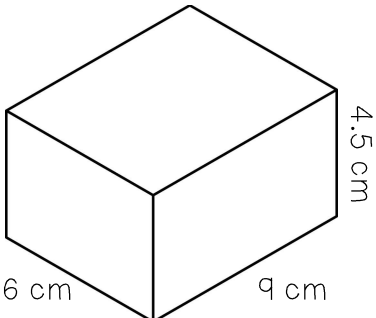


VOLUME WITH RATIONAL LENGTHS

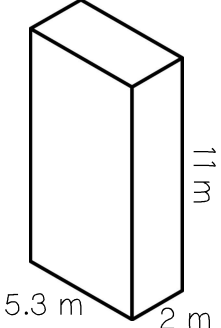
Use your understanding of finding the volume of rectangular prisms to solve problems with rational numbers.

1



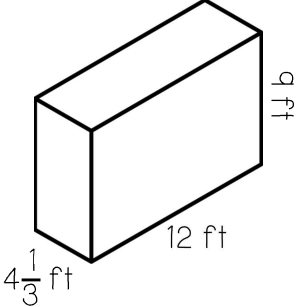
RECTANGULAR PRISM	
FORMULA	
PLUG IN VALUES	
VOLUME	

2



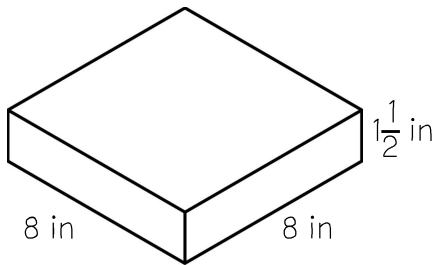
RECTANGULAR PRISM	
FORMULA	
PLUG IN VALUES	
VOLUME	

3

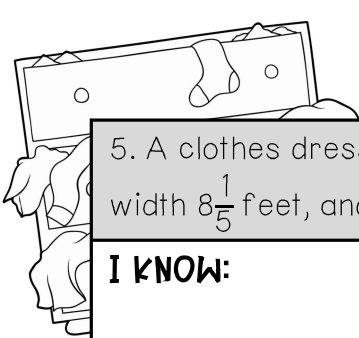


RECTANGULAR PRISM	
FORMULA	
PLUG IN VALUES	
VOLUME	

4



RECTANGULAR PRISM	
FORMULA	
PLUG IN VALUES	
VOLUME	



Practice applying volume to the real-world situations below.

5. A clothes dresser is the shape of a rectangular prism. The dresser has a height of 3 feet, a width $8\frac{1}{5}$ feet, and a depth of 2 feet. How many cubic feet will the dresser hold?

I KNOW:

I NEED TO KNOW:

PLAN AND WORK:

SOLUTION:

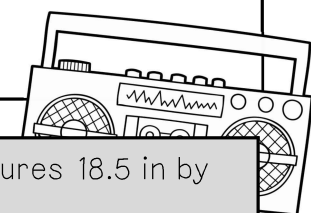
6. A shipping crate is advertised to hold up to 24 cubic feet. If a box in the shape of a rectangular prism measures 2 ft by $1\frac{1}{2}$ ft by 0.8 ft, how many boxes will the shipping crate hold?

I KNOW:

I NEED TO KNOW:

PLAN AND WORK:

SOLUTION:



7. A music stereo is packed in a box shaped like a rectangular prism that measures 18.5 in by 32 in by 12.2 in. What is the volume of box?

I KNOW:

I NEED TO KNOW:

PLAN AND WORK:

SOLUTION:

Summarize today's lesson:

VOLUME WITH RATIONAL LENGTHS

Solve each of the questions in the left column. Then, draw a line to the solution in the right column. After all the questions have been completed, unscramble the remaining letters to form the name of a mystery character.

<p>1. A filing cabinet measures 5 feet high, 18 inches wide and 2 feet deep. What is the volume of the filing cabinet?</p>	<p>Q P R G</p>	<p>1,224</p>
<p>2. A moving truck claims to hold 300 cubic feet of boxes. The truck is 25 feet in length and 8 feet in height. What is the width of the moving truck?</p>	<p>M Z D N</p>	<p>15</p>
<p>3. A pair of children's shoes comes in a box measuring 10.2 cm by 15 cm by 8 cm. What is the volume of the shoe box?</p>	<p>V A R A V</p>	<p>686</p>
<p>4. A stack of bricks has a base with an area of 38 inches². If the height is 12 inches, what is the volume?</p>	<p>O W R</p>	<p>15</p>
<p>5. A packing box is being filled with packing peanuts. The box measures $1\frac{1}{2}$ feet by $1\frac{1}{2}$ feet by 2 feet. How many cubic feet of packing peanuts will fit?</p>	<p>N O E B R X</p>	<p>4.5</p>
<p>6. A pizza box measures 14 inches by 14 inches by 3.5 inches. What is the volume of the pizza box?</p>	<p>U W O I N</p>	<p>456</p>

MYSTERY CHARACTER: