

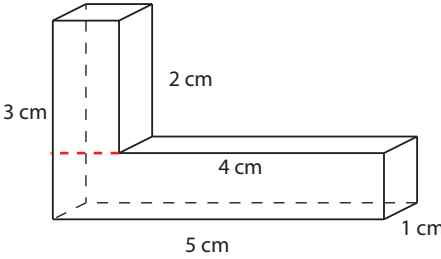
Name: _____

Date: _____

Irregular Volume Shapes

Volume is the measure of space inside of a solid object.

Volume is measured in **cubic units** (mm^3 , ft^3).



Shape A: $V = 1 \text{ cm} \times 1 \text{ cm} \times 2 \text{ cm}$
 $V = 2 \text{ cm}^3$

Shape B: $V = 5 \text{ cm} \times 1 \text{ cm} \times 1 \text{ cm}$
 $V = 5 \text{ cm}^3$

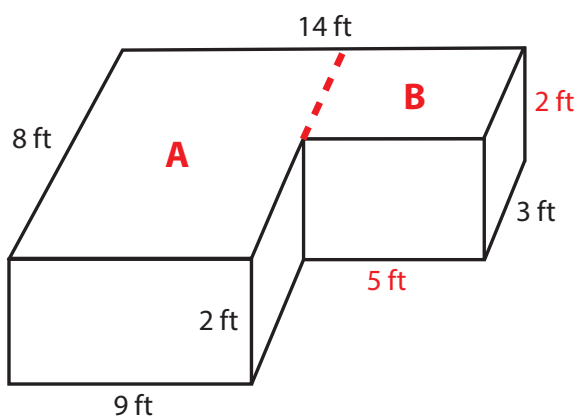
Total Volume: $2 \text{ cm}^3 + 5 \text{ cm}^3 = 7 \text{ cm}^3$

Volume = 7 cm³

To find the volume of an irregular shape, separate the shape into rectangular prisms. Calculate the volume for each shape, and then add the volume of the shapes together to get the volume of the larger shape.

$V = \text{length (l)} \times \text{width (w)} \times \text{height (h)}$.

Directions: Calculate the volume of the shapes and explain how you got your answer.



Show your work.

Shape A: $9 \text{ ft} \times 8 \text{ ft} \times 2 \text{ ft}$

$V = 144 \text{ ft}^3$

Shape B: $5 \text{ ft} \times 3 \text{ ft} \times 2 \text{ ft}$

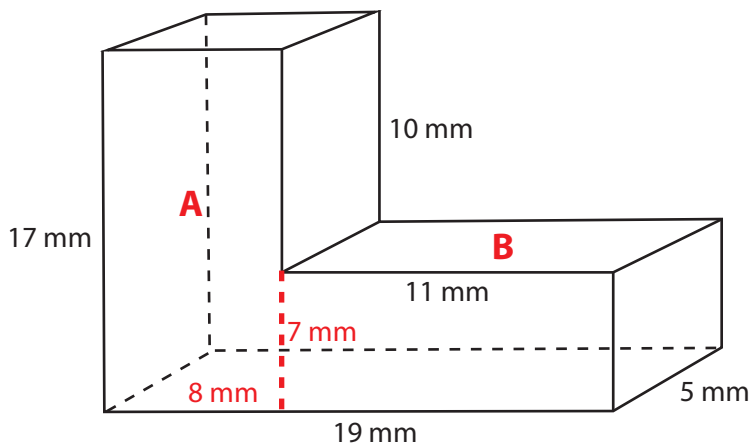
$V = 30 \text{ ft}^3$

Total Volume: $144 \text{ ft}^3 + 30 \text{ ft}^3$

Volume = 174 ft³

Explain your answer.

I separated the irregular shape into two rectangular prisms. Then, I calculated the volume for shape A as 144ft^3 and the volume for shape B as 30ft^3 . Lastly, I added the two volumes to get the total volume of 174ft^3 .



Show your work.

Shape A: $8 \text{ mm} \times 5 \text{ mm} \times 17 \text{ mm}$

$V = 680 \text{ mm}^3$

Shape B: $11 \text{ mm} \times 5 \text{ mm} \times 7 \text{ mm}$

$V = 385 \text{ mm}^3$

Total Volume: $680 \text{ mm}^3 + 385 \text{ mm}^3$

Volume = 1,065 mm³

Explain your answer.

I separated the irregular shape into two rectangular prisms. Then, I calculated the volume for shape A as 680mm^3 and the volume for shape B as 385mm^3 . Lastly, I added the two volumes to get the total volume of $1,065\text{mm}^3$.