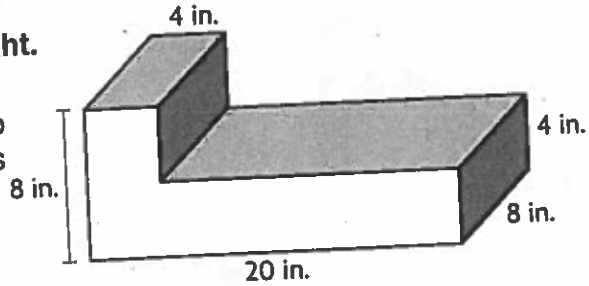# Find Volume of Composed Figures

A composite figure is a solid made up of two or more solids. To find the volume of a composite figure, first find the volume of each solid that makes up the figure. Then find the sum of the volumes of the figures.
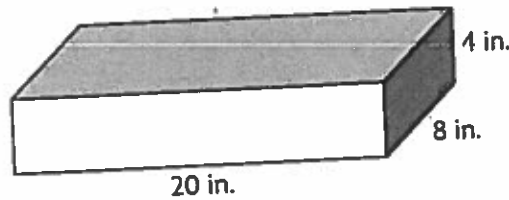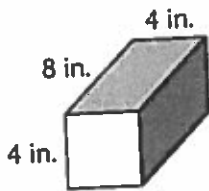
Find the volume of the composite figure at right.

Step 1 Break apart the composite figure into two rectangular prisms. Label the dimensions of each prism.

4 in.

8 in.

4 in.

8 in.

20 in.

Prism 1   **Prism 2**

4 in.

8 in.

4 in.

20 in.

4 in.

8 in.

Step 2 Find the volume of each prism.

Prism 1

$V = (l \times w) \times h$

$V = \underline{4} \times \underline{8} \times \underline{4}$

$V = 128 \text{ in.}^3$

Prism 2

$V = (l \times w) \times h$

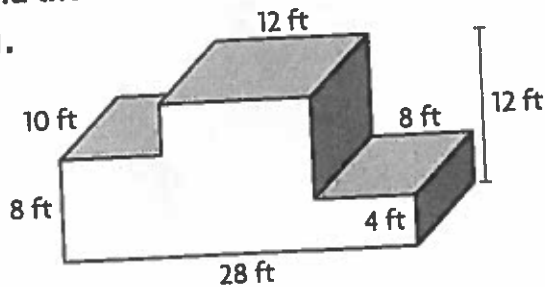$V = \underline{20} \times \underline{8} \times \underline{4}$

$V = 640 \text{ in.}^3$

Step 3 Find the sum of the volumes of the two prisms.

Volume of Prism 1 + Volume of Prism 2 = Volume of Composite Figure

$\underline{128}$ + $\underline{640}$ = Volume of Composite Figure

$\underline{768}$ = Volume of Composite Figure

So, the volume of the composite figure is 768 in.^{3}

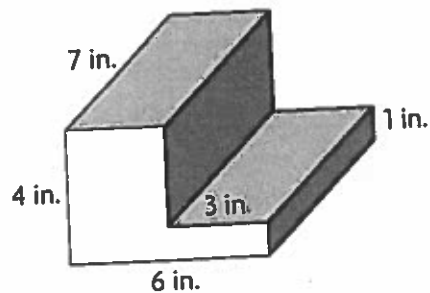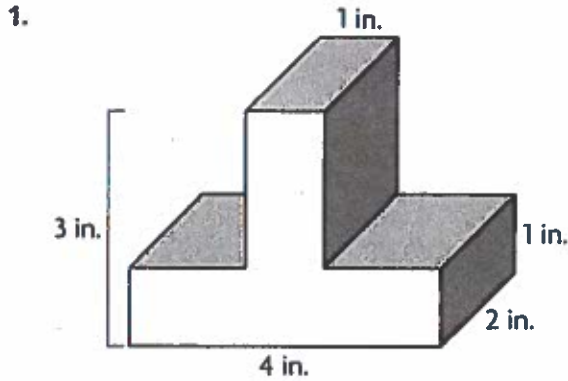**Find the volume of the composite figure.**

1.

12 ft

10 ft

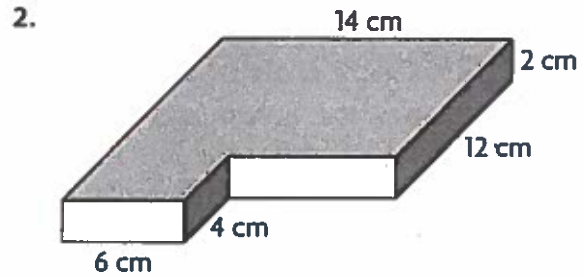8 ft

8 ft

4 ft

28 ft

12 ft

$V = \underline{\hspace{2cm}}$

2.

7 in.

1 in.

4 in.

3 in.

6 in.

$V = \underline{\hspace{2cm}}$

Measurement and Data

Find Volume of Composed Figures

Find the volume of the composite figure.

1.

1 in.

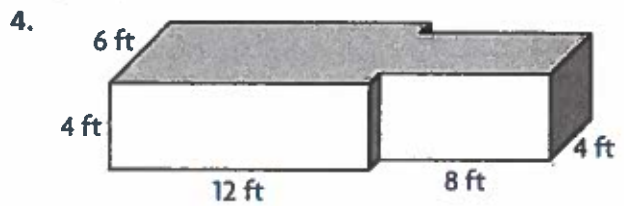3 in.

1 in.

2 in.

4 in.

V = _____

2.

14 cm

2 cm

12 cm

4 cm

6 cm

V = _____

3.

8 in.

3 in.

1 in.
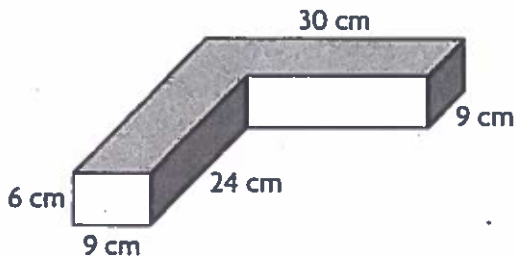
6 in.

1 in.

V = _____

4.

6 ft

4 ft

4 ft

12 ft

8 ft
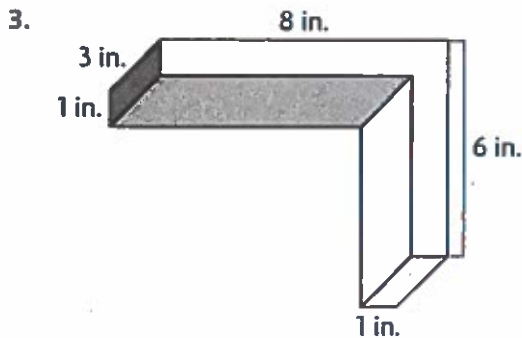
V = _____

Problem Solving REAL WORLD

5. As part of her shop class, Jules made the figure below out of pieces of wood. How much space does the figure she made take up?

30 cm

9 cm

24 cm

6 cm

9 cm

_____

6. What is the volume of the composite figure below?

9 ft

6 ft

6 ft

12 ft

27 ft

_____