Name _____

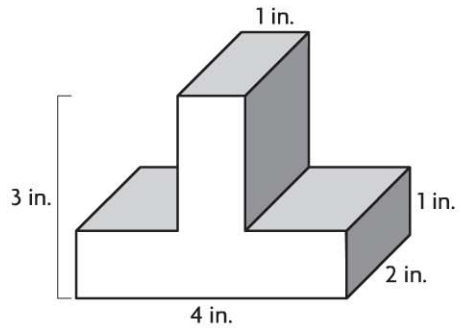
Find Volume of Composed Figures

COMMON CORE STANDARD CC.5.MD.5c

Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition.

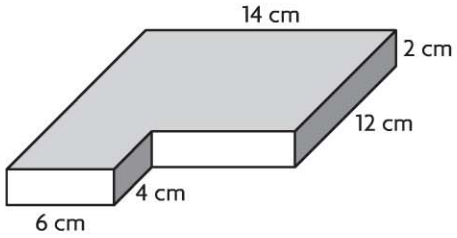
Find the volume of the composite figure.

1.



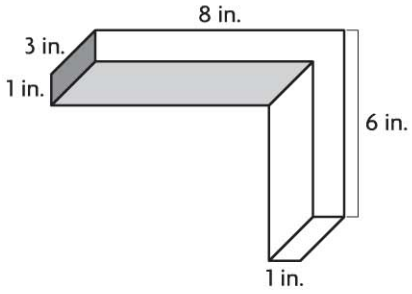
$V =$ _____

2.



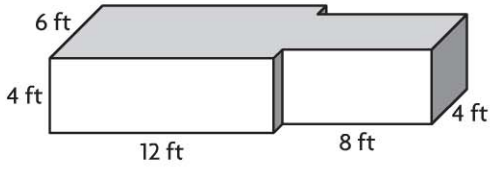
$V =$ _____

3.



$V =$ _____

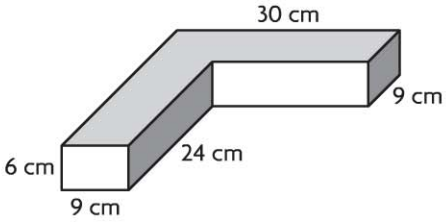
4.



$V =$ _____

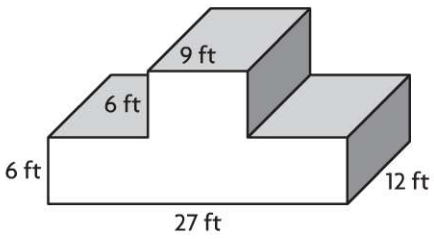
Problem Solving REAL WORLD

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?



_____

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

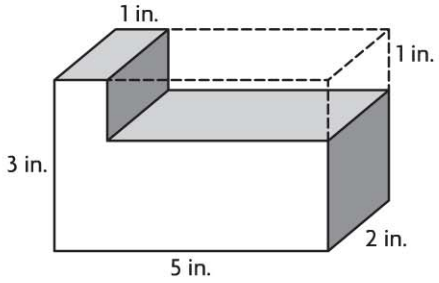


_____

TEST PREP

Lesson Check (CC.5.MD.5c)

1. Which expression represents the volume of the composite figure?



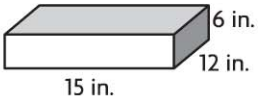
Ⓐ $(5 \times 2) - (3 \times 1)$

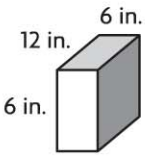
Ⓑ $5 \times 2 \times 3$

Ⓒ $(5 \times 2 \times 3) - (4 \times 2 \times 1)$

Ⓓ $4 \times 2 \times 1$

2. Suppose you take the small prism and stack it on top of the larger prism. What will be the volume of the composite figure?





Ⓐ 432 cubic inches

Ⓑ 648 cubic inches

Ⓒ 1,080 cubic inches

Ⓓ 1,512 cubic inches

Spiral Review (CC.5.NF.6, CC.5.NF.7c, CC.5.MD.5a, CC.5.MD.5b)

3. Jesse wants to build a wooden chest with a volume of 8,100 cubic inches. The length will be 30 inches and the width will be 15 inches. How tall will Jesse's chest be? (Lesson 11.11)

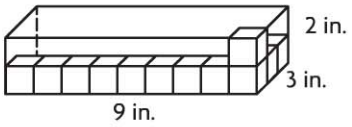
Ⓐ 18 in.

Ⓑ 30 in.

Ⓒ 270 in.

Ⓓ 540 in.

4. What is the volume of the rectangular prism? (Lesson 11.9)



Ⓐ 14 in.^{3}

Ⓑ 27 in.^{3}

Ⓒ 45 in.^{3}

Ⓓ 54 in.^{3}

5. Adrian's recipe for cranberry relish calls for $1\frac{3}{4}$ cups of sugar. He wants to use $\frac{1}{2}$ that amount. How much sugar should he use? (Lesson 7.9)

Ⓐ $1\frac{1}{4}$ cups

Ⓑ $1\frac{1}{6}$ cups

Ⓒ $\frac{7}{8}$ cup

Ⓓ $\frac{1}{2}$ cup

6. Joanna has a board that is 6 feet long. She cuts it into pieces that are each $\frac{1}{4}$ foot long. Which equation represents the number of pieces she cut? (Lesson 8.5)

Ⓐ $6 \div \frac{1}{4} = n$

Ⓑ $6 \div 4 = n$

Ⓒ $\frac{1}{4} \div 6 = n$

Ⓓ $\frac{1}{4} \div \frac{1}{6} = n$