Write an expression for each item. Include the solution.

EXAMPLE

14 minus 7

$$14 - 7 = 7$$

1 8 plus 2

2 5 times 4

3 15 minus 8

- (4) the sum of 70 and 45
- 5 the product of 8 and 100
- 6 double 30

- 7 the sum of 6 and 5 minus 4
- 8 the quotient of 36 and 6
- **9** triple 100

(10) Circle the quadrilaterals.

















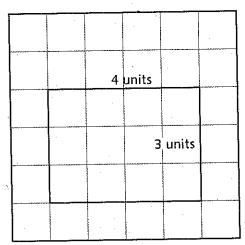
- ①1 Draw two right triangles below.
- (12) Writing/Reasoning Explain what attribute makes your triangles right triangles.

Evaluate each expression.

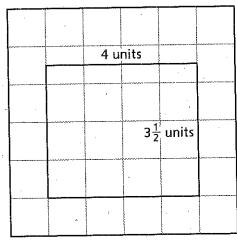
$$\boxed{14} \quad 4 + [3 * (3 - 1) + 6] = \underline{\hspace{1cm}}$$

In Problems 1 and 2, each grid square is 1 square unit. Find the area of each rectangle. Don't forget to include the unit.

(1)



(2)

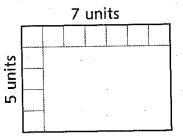


Area: _

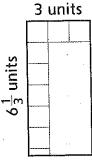
Area: _____

Find the area of each rectangle. Write a number sentence to show your thinking.

(3)



(4)



Area: ____ square units

number sentence

Area: _____ square units

number sentence

Add.

$$\frac{1}{5} + \frac{2}{5} = \underline{\hspace{1cm}}$$

$$\frac{1}{12} + \frac{q}{12} = \underline{\hspace{1cm}}$$

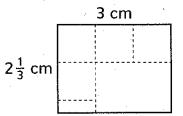
$$\underbrace{11} \quad \frac{5}{8} + \frac{6}{8} = \underline{\hspace{1cm}}$$

(12)
$$\frac{6}{7} + \frac{1}{7} =$$

Find the area of each rectangle below. Write a number sentence for each problem.

1 cm 1 cm

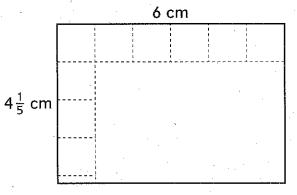
1



Area = _____

Number sentence = _____

(2)



Area = _____

Number sentence = _____

Solve.

- 3 12 inches = ____ feet
- 4 60 inches = ____ feet
- **5** 54 inches = ____ feet
- **6** 28 inches = _____ feet
- 7 100 inches = ____ feet
- (8) 50 inches = _____ feet

Give the value of 5 in each number below.

9 527 _____

10 105 _____

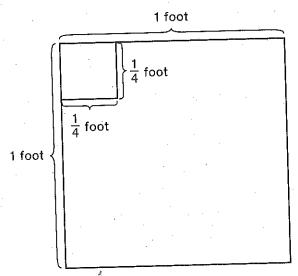
11 5,476 _____

12 3,250 _____

(13) 685 _____

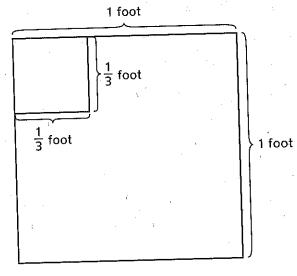
14 7,561 _____

1 How many squares of $\frac{1}{4}$ foot side length would fit into 1 square foot? Draw lines on the picture to help.



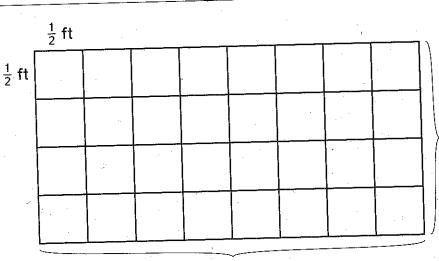
squares with a side length of $\frac{1}{4}$ foot fit into 1 square foot.

2 How many squares of $\frac{1}{3}$ foot side length would fit into 1 square foot? Draw lines on the picture to help.



squares with a side length of $\frac{1}{3}$ foot fit into 1 square foot.

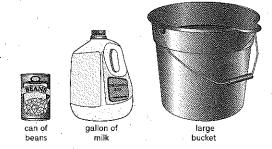
The students in a fifth grade class want to design a paper quilt on a bulletin board. Each quilt square is $\frac{1}{2}$ foot on each side. The bulletin board is 4 feet wide and 2 feet long.



4 feet

- (A) It takes _____ squares to cover the board.
- B it takes _____ squares to cover 1 square foot.
- The area of the board is _____ square feet.

2 feet



- 1 Of the objects above, which has the smallest volume?
- 2 Which has the greatest volume? _____

4 Writing/Reasoning How do you know these items have volume?

Find the area.

5

 $4\frac{1}{2}$ inches

9 inches

Area = _____ square inches.

Writing/Reasoning Anna says that a square can have volume. Is she right or wrong? Explain.

Leah decided to find the volume of a box using cubes. (2)She fit 8 layers of cubes with 9 cubes in each layer into her box.

The volume of her box is _____ cubes.

(3) Writing/Reasoning Tim and Mary each had a box. Tim's box could hold 250 beans. Mary's box could hold 400 beans. Whose box has a greater volume? Explain.

If you were at home and needed to compare the volume of two objects using non-standard units, what are 3 objects you could fill the objects with to find volume?

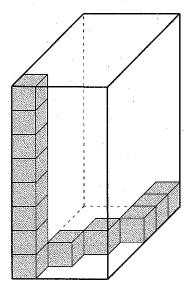
____, ______, and ______

Evaluate.

Convert each unit of measurement.

The cubes in each rectangular prism are the same size. Each prism has at least one stack of cubes that goes up to the top. Find the total number of cubes needed to completely fill each prism. Then find the volume of each prism.

1

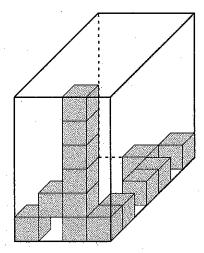


Cubes needed to fill Prism A:

____cubes

Volume of Prism A: _____ units³

(2)

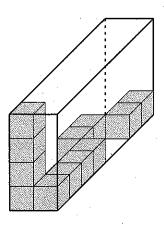


Cubes needed to fill Prism C:

____ cubes

Volume of Prism C: _____ units³

3

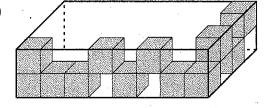


Cubes needed to fill Prism B:

____cubes

Volume of Prism B: _____ units³

4



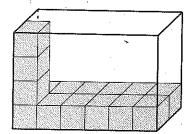
Cubes needed to fill Prism D:

____cubes

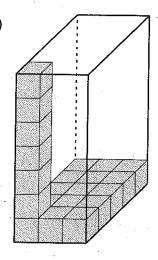
Volume of Prism C: _____ units³

Find the volume of each box.

(1)



2



Volume: ____ units³

- Volume: _____ units³
- (3) Natasha filled a box with one layer of 8 unit cubes. She figured out the box could hold 7 layers. The volume of Natasha's box is _____ units³.
- (4) Amy determines that the volume of her box is 100 units 3 . If one layer of cubes is 20 cubes, how many layers of cubes fit in her box? _____ layers
- A snail crawled 36 inches in one hour. How many feet did the snail crawl? _____ feet
- Andrea ran 90 feet. How many yards did she run? _____ yards
- Tom's poster measured 200 cm across. How many meters across is Tom's poster? _____ meters
- A pencil is $\frac{1}{2}$ a foot long. How many inches is the pencil? _____ inches

$$(9) 8 * [6 + (9 - 3)] = ____$$

$$8 * [6 + (9 - 3)] = ____$$
 (10) $175 + [18/(199 - 196)] = ____$

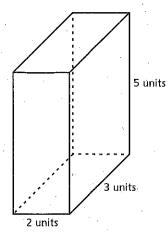
Find the volume of each prism.

Remember the two formulas to find the volume of a prism:

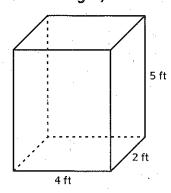
 $V = I \times w \times h$ (volume = length \times width \times height)

 $V = B \times h$ (volume = area of the base \times height)

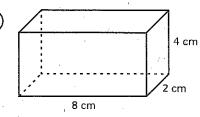
1



(2



3

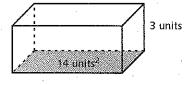


Volume: _____ units³

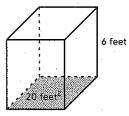
Volume: _____ feet³

Volume: ____ cm³

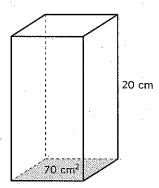
4



(5)



6



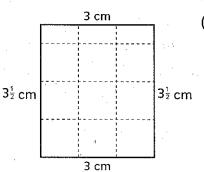
Volume: _____ units³

Volume: _____ feet³

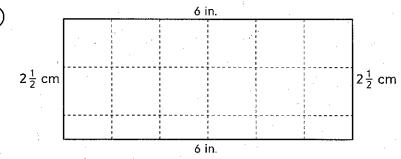
Volume: ____ cm³

Find the area of each rectangle.

7



8

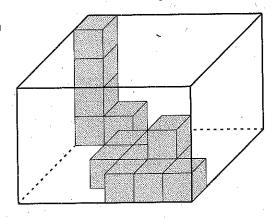


Area = $_{\text{max}} \text{ cm}^2$

Area = $\underline{\hspace{1cm}}$ in²

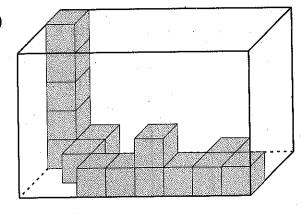
Find the volume of each prism.

(1)



Volume = ____ cubic units

2



Volume = ____ cubic units

Circle the most appropriate unit of measure for each object.

- the volume of a cereal box (3)
- the volume of a classroom
- the volume of a juice box
- (6) the volume of a closet
- the volume of a train car
- cubic inches cubic inches
- cubic inches
- cubic inches
- cubic inches

- cubic feet

- cubic yards

Convert the units.

1 cubic yard = (8)

____ cubic feet

1 cubic m =

____ cubic cm

1 cubic foot =

____ cubic inches

Find the volume of a rectangular prism with the given dimensions.

(11) length = 9 meters

height = 3 meters

width = 2 meters

. m³

length = 4 meters

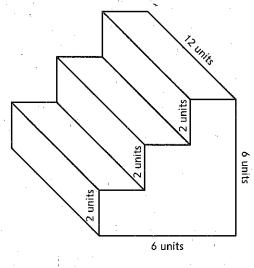
height = 10 meters

width = 6 meters

₋ m³

Find the volume of each figure below. Then name one real-world object that the figure could model.

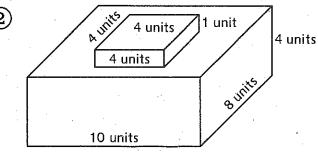
(1)



_____ cubic units Volume = _

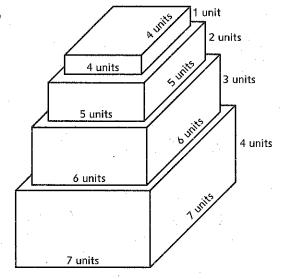
This figure could model . . .

2



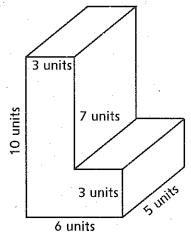
Volume = ____ cubic units

This figure could model . . .



Volume = ____ cubic units

This figure could model . . .

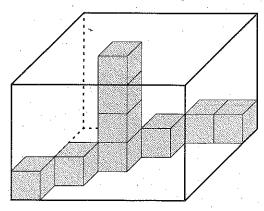


Volume = ____ cubic units

This figure could model . . .

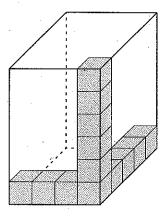
Find the volume of each shape.

1

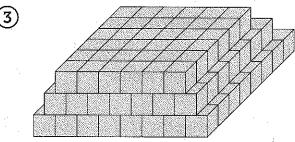


$$V = \underline{\qquad} cm^3$$

2

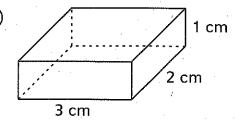


$$V =$$
____ cm³



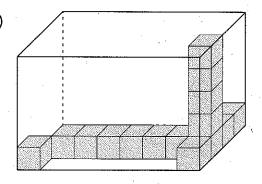
$$V = \underline{\qquad}$$
 cm³



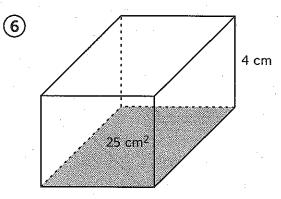


$$V =$$
____ cm³

(5)



$$V = \frac{1}{2}$$
 cm³



$$V = \underline{\qquad}$$
 cm³