Understand Volume

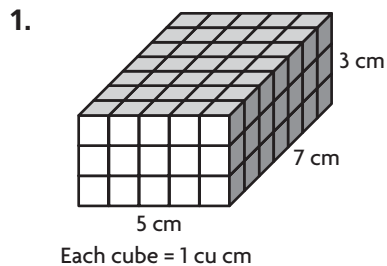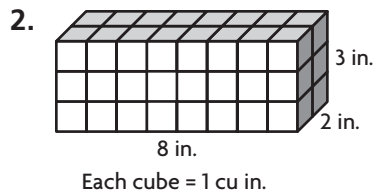**Common Core** COMMON CORE STANDARD—5.MD.C.3b
5.MD.C.4 *Geometric measurement: understand
concepts of volume and relate volume to
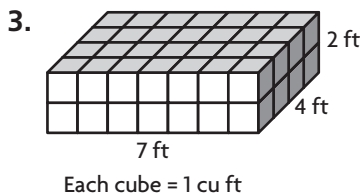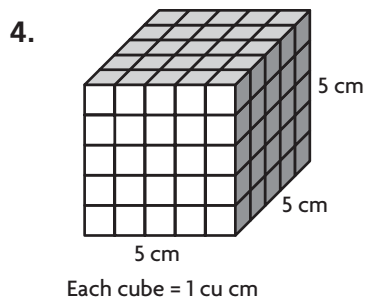multiplication and to addition.*

Use the unit given. Find the volume.

1.

3 cm
7 cm
5 cm
Each cube = 1 cu cm

Volume = ___105___ cu ___cm___

2.

3 in.
2 in.
8 in.
Each cube = 1 cu in.

Volume = _____ cu _____

3.

2 ft
4 ft
7 ft
Each cube = 1 cu ft

Volume = _____ cu _____

4.

5 cm
5 cm
5 cm
Each cube = 1 cu cm

Volume = _____ cu _____

5. Compare the volumes. Write $<$, $>$, or $=$.

4 ft
3 ft
5 ft
Each cube = 1 cu ft

_____ cu ft ◯ _____ cu ft
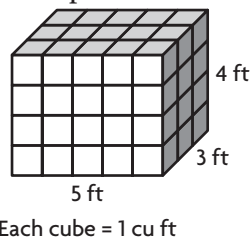
2 ft
5 ft
6 ft
Each cube = 1 cu ft

Problem Solving Real World
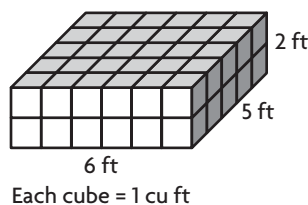
**6.** A manufacturer ships its product in boxes with
edges of 4 inches. If 12 boxes are put in a carton
and completely fill the carton, what is the volume
of the carton?

_____

_____

7. Matt and Mindy each built a rectangular prism
that has a length of 5 units, a width of 2 units, and
a height of 4 units. Matt used cubes that are 1 cm
on each side. Mindy used cubes that are 1 in. on
each side. What is the volume of each prism?

_____

_____

Lesson Check (5.MD.C.3b, 5.MD.C.4)

1. Elena packed 48 cubes into this box. Each cube has edges that are 1 centimeter. How many layers of cubes did Elena make?

2. What is the volume of the rectangular prism?

5 ft

6 ft
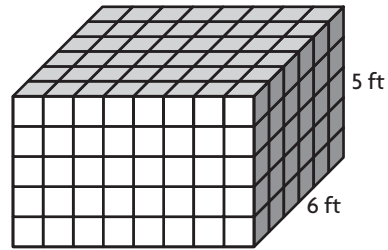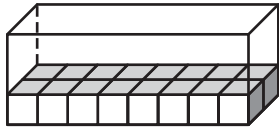
8 ft

Each cube = 1 cu ft

Spiral Review (5.MD.A.1, 5.G.A.1, 5.G.B.3, 5.G.B.4)

3. Juan made a design with polygons. Which polygon in Juan's design is a pentagon?

C

B

A

D

4. What ordered pair describes the location of point *P*?

y
6
5
4 *P*
3
2
1
0 1 2 3 4 5 6 *x*
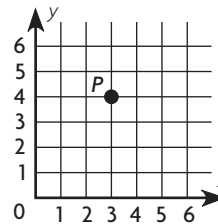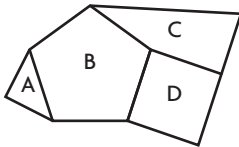
5. What is the least number of acute angles that a triangle can have?

6. Karen bought 3 pounds of cheese to serve at a picnic. How many ounces of cheese did Karen buy?

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