

STUDY LINK
9•1

Plotting Points



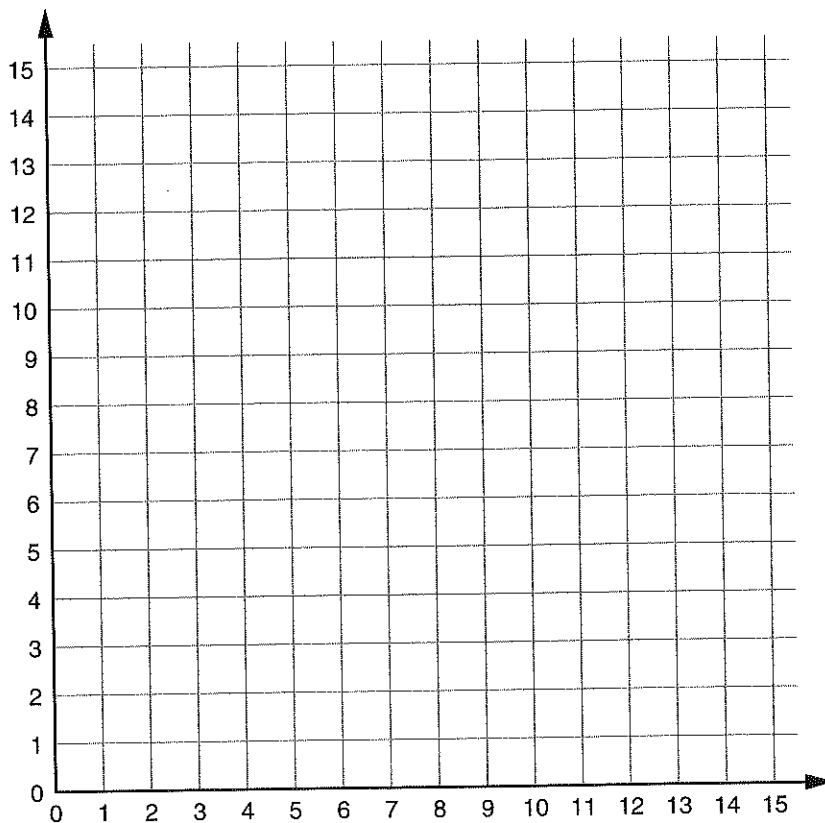
1. Plot the following points on the grid below. After you plot each point, draw a line segment to connect it to the last point you plotted.

Reminder: Use your straightedge!

(3,6); (11,11); (15,11); (15,7); (7,2); (3,2); (3,6); (7,6)

Draw a line segment connecting (7,6) and (7,2).

Draw a line segment connecting (7,6) and (15,11).



2. What 3-dimensional shape could this drawing represent? _____
3. a. What ordered pair would name the missing vertex to represent a prism? _____
- b. Draw the missing vertex, and then add dashed lines for the missing edges.

Practice

4. $3,745 + 8,761 + 791 =$ _____
5. $3.745 + 87.61 + 781 =$ _____
6. $4\frac{3}{8} + 5\frac{7}{8} =$ _____
7. $\frac{1}{5} + \frac{3}{4} =$ _____

STUDY LINK
9•2**Plotting Figures on a Coordinate Grid**

1. Plot three points, and make a triangle on the grid below. Label the points as *A*, *B*, and *C*. List the coordinates of the points you've drawn.

A: (____, ____) *B*: (____, ____) *C*: (____, ____)

2. Circle the name of the kind of triangle you drew.

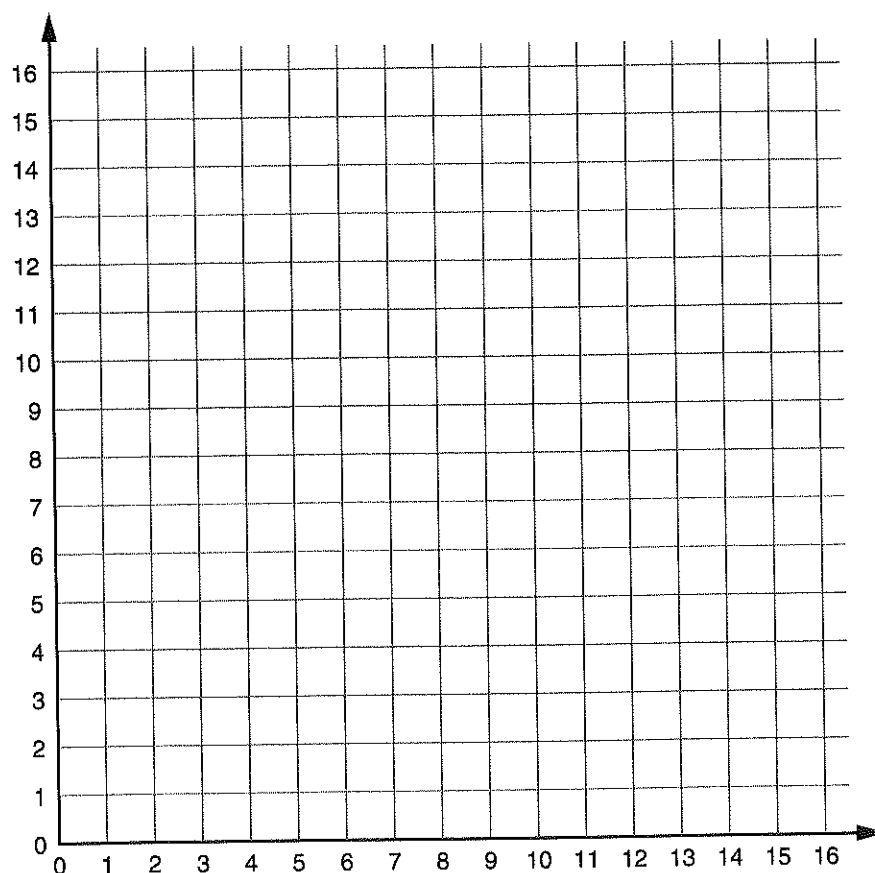
scalene equilateral isosceles

3. Plot four points, and make a parallelogram on the grid below. Label the points as *M*, *N*, *O*, and *P*. List the coordinates of the points you've drawn.

M: (____, ____) *N*: (____, ____) *O*: (____, ____) *P*: (____, ____)

4. Circle another name for the parallelogram you've drawn.

quadrangle rhombus rectangle square



STUDY LINK
9•3

Reflections on a Coordinate Grid

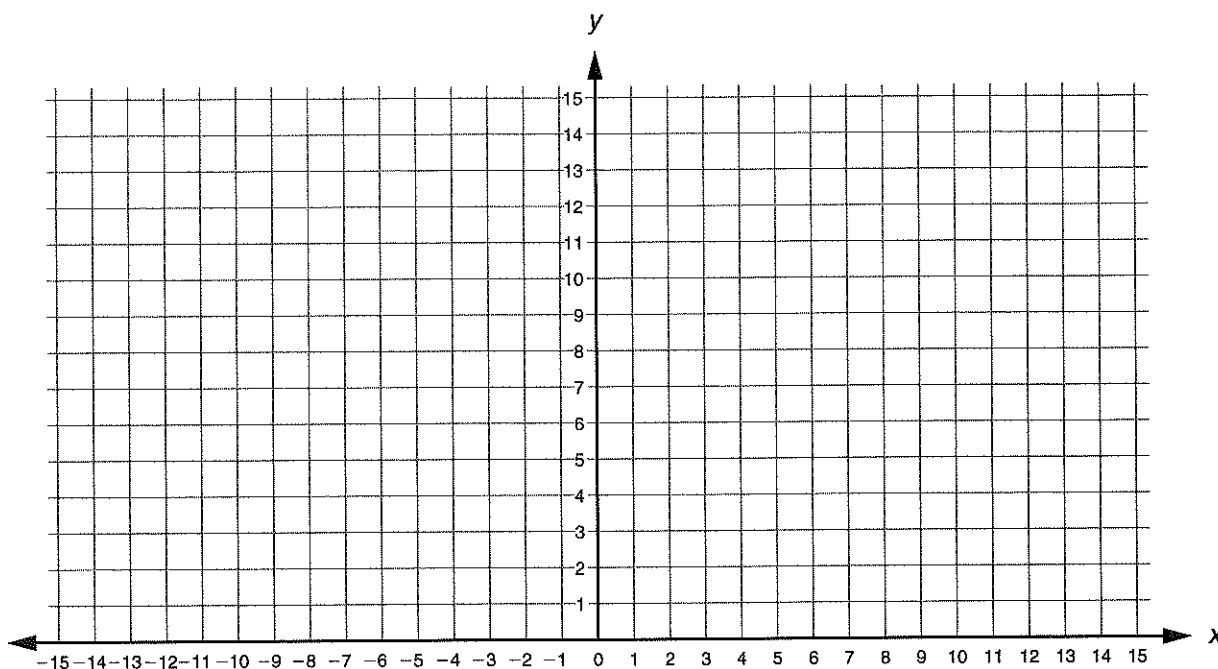


1. Plot the points listed below. Use a straightedge to connect the points in the same order that you plot them.

(6,0); (6,2); (5,3); (3,3); (3,6); (6,7); (7,10); (9,11); (11,11);
 (13,10); (13,3); (11,2); (11,0)

2. Which number (the first number or the second number) in the pair do you need to change to the opposite in order to draw the reflection of this design on the other side of the y-axis?
- _____

3. Draw the reflection described above. Plot the points and connect them.


Practice

Multiply.

4. $752 * 35 =$ _____

5. $75.2 * 0.35 =$ _____

6. $\frac{7}{8} * \frac{2}{3} =$ _____

7. $2\frac{1}{2} * \frac{3}{4} =$ _____

STUDY LINK
9•4

More Area Problems



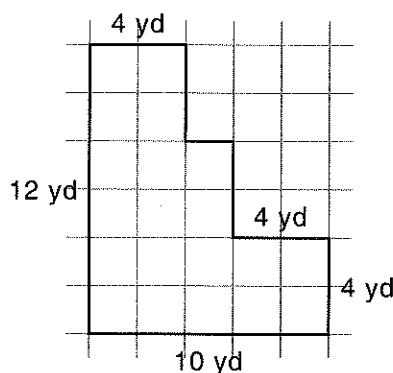
1. Rashid can paint 2 square feet of fence in 10 minutes. Fill in the missing parts to tell how long it will take him to paint a fence that is 6 feet high by 25 feet long. Rashid will be able to paint

_____ of fence in _____
 (area) (hours/minutes)

2. Regina wants to cover one wall of her room with wallpaper. The wall is 9 feet high and 15 feet wide. There is a doorway in the wall that is 3 feet wide and 7 feet tall. How many square feet of wallpaper will she need to buy?

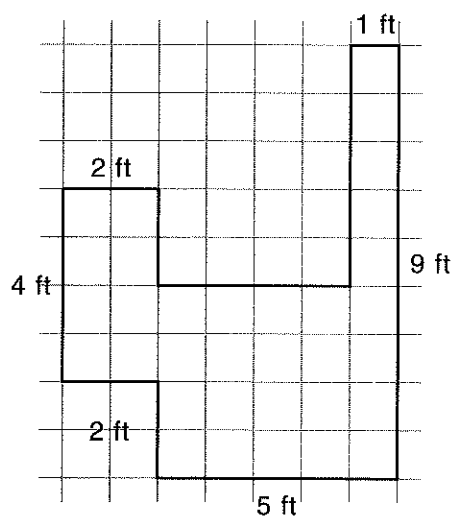
Calculate the areas for the figures below.

3.



Area = _____ yd^2

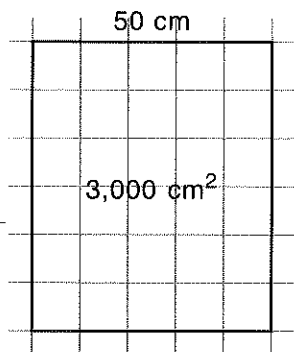
4.



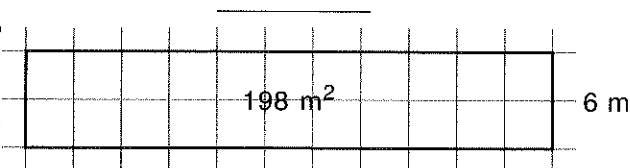
Area = _____ ft^2

Fill in the missing lengths for the figures below.

5.



6.



STUDY LINK
9.5

The Rectangle Method



Use the rectangle method to find the area of each figure below.

Example:

$$5 * 3 = 15$$

$$\frac{1}{2} \text{ of } 15 = 7.5$$

Area = 7.5 cm²

1 cm²

1. Area = _____ cm²

2. Area = _____ cm²

3. Area = _____ cm²

4. Area = _____ cm²

5. Area = _____ cm²

6. Area = _____ cm²

STUDY LINK
9•6

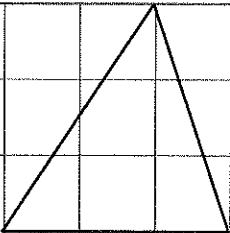
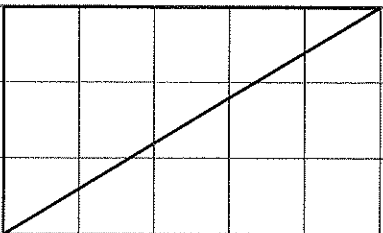
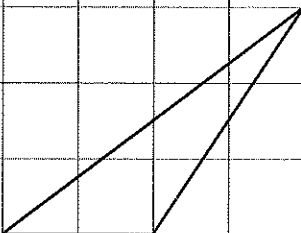
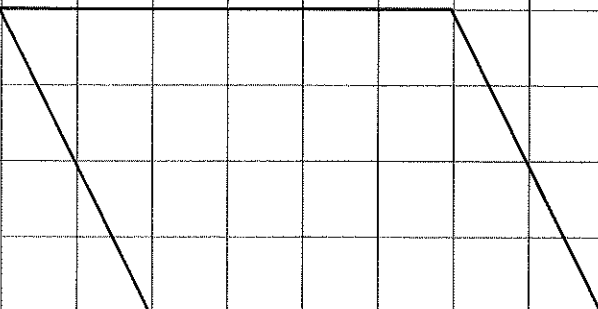
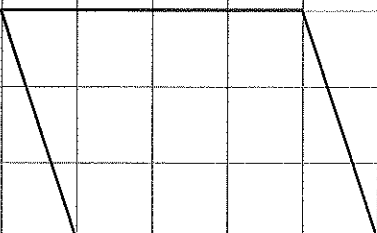
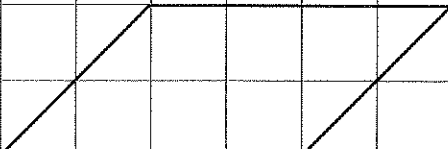
Area Formulas



For each figure below, label the base and the height, find the area, and record the number model you use to find the area.

Area of a parallelogram: $A = b * h$

Area of a triangle: $A = \frac{1}{2} * b * h$

 <p>1. Area: _____ (unit) Number model: _____</p>	 <p>2. Area: _____ (unit) Number model: _____</p>
 <p>3. Area: _____ (unit) Number model: _____</p>	 <p>4. Area: _____ (unit) Number model: _____</p>
 <p>5. Area: _____ (unit) Number model: _____</p>	 <p>6. Area: _____ (unit) Number model: _____</p>

STUDY LINK
9•7

An Area Review



Circle the most appropriate unit to use for measuring the area of each object.

1. The area of a football field

cm^2	ft^2	yd^2	in^2
---------------	---------------	---------------	---------------

3. The area of a postage stamp

cm^2	ft^2	yd^2	in^2
---------------	---------------	---------------	---------------

5. Area of a parallelogram-shaped sign on the highway

cm^2	ft^2	yd^2	in^2
---------------	---------------	---------------	---------------

2. The area of your hand

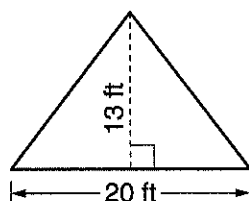
cm^2	ft^2	yd^2	in^2
---------------	---------------	---------------	---------------

4. Area of a triangular kite

cm^2	ft^2	yd^2	in^2
---------------	---------------	---------------	---------------

Use a formula to find the area of each figure. Write the appropriate number sentence and the area.

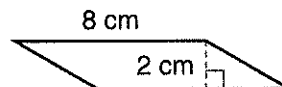
6.



Number sentence: _____

Area: _____ (unit)

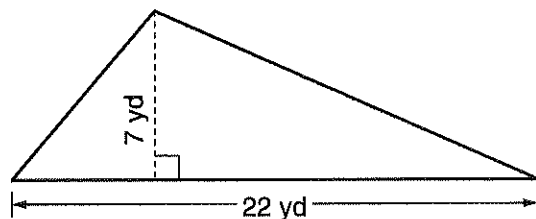
7.



Number sentence: _____

Area: _____ (unit)

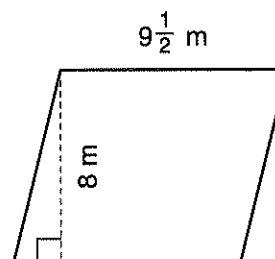
8.



Number sentence: _____

Area: _____ (unit)

9.



Number sentence: _____

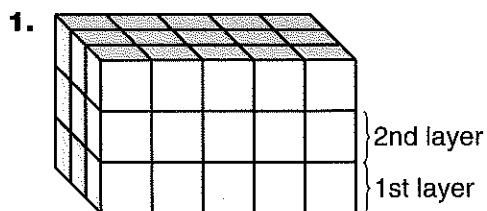
Area: _____ (unit)

STUDY LINK
9•8

Volumes of Cube Structures



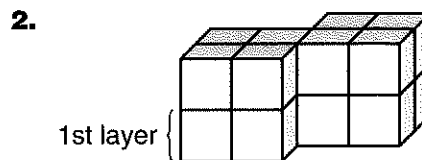
The structures below are made up of centimeter cubes.



Area of base = _____ cm^2

Volume of first layer = _____ cm^3

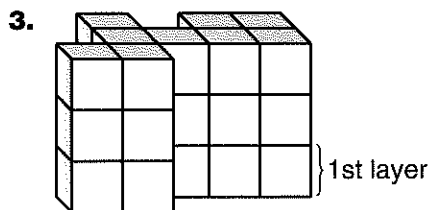
Volume of entire
cube structure = _____ cm^3



Area of base = _____ cm^2

Volume of first layer = _____ cm^3

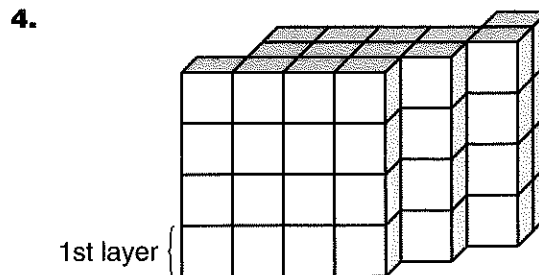
Volume of entire
cube structure = _____ cm^3



Area of base = _____ cm^2

Volume of first layer = _____ cm^3

Volume of entire
cube structure = _____ cm^3



Area of base = _____ cm^2

Volume of first layer = _____ cm^3

Volume of entire
cube structure = _____ cm^3

Practice

5. $\frac{3}{5} * \frac{1}{8} =$ _____

6. $3,840 / 4 =$ _____

7. $960 * 4 =$ _____

8. $\frac{4}{5} * \frac{5}{6} =$ _____

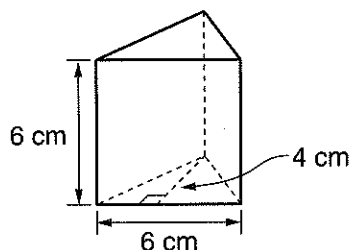
STUDY LINK
9•9

Volumes of Prisms

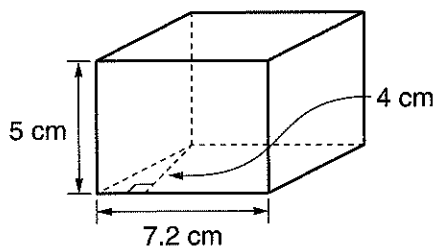


The volume V of any prism can be found with the formula $V = B * h$, where B is the area of the base of the prism, and h is the height of the prism from that base.

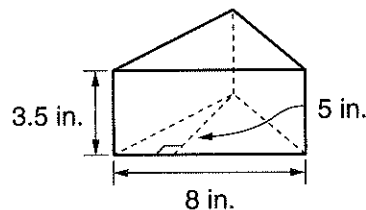
1.


 Volume = _____ cm^3

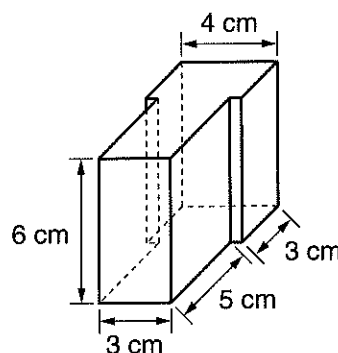
2.


 Volume = _____ cm^3

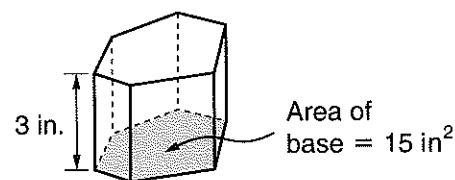
3.


 Volume = _____ in^3

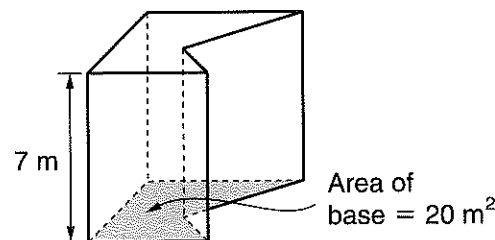
4.


 Volume = _____ cm^3

5.


 Volume = _____ in^3

6.


 Volume = _____ m^3
Practice

Solve each equation.

7. $36 * r = 144$ _____

8. $3,577 - t = 3,822$ _____

9. $3,577 - m = 3,417$ _____

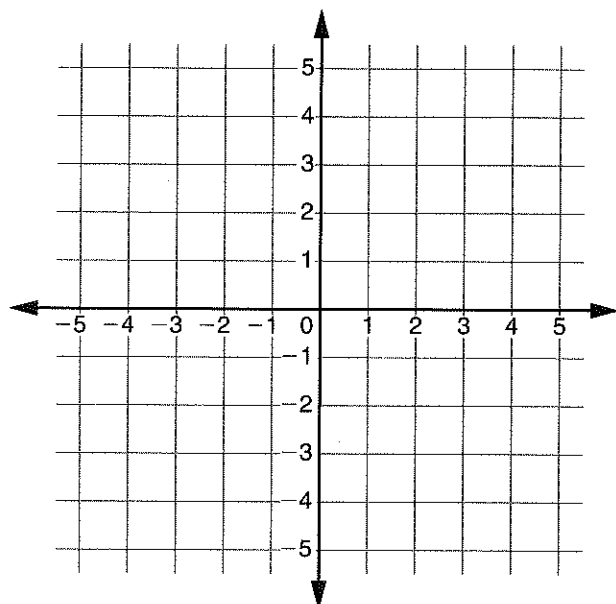
10. $d * 68 = 340$ _____

STUDY LINK
9•10

Unit 9 Review



1. Plot 6 points on the grid below and connect them to form a hexagon.
List the coordinates of the points you plotted.



(_____, _____)

(_____, _____)

(_____, _____)

(_____, _____)

(_____, _____)

(_____, _____)

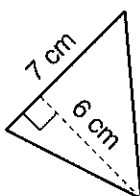
Find the area of the figures shown below.
Write the number model you used to
find the area.

Area of a rectangle: $A = b * h$

Area of a parallelogram: $A = b * h$

Area of a triangle: $A = \frac{1}{2} * b * h$

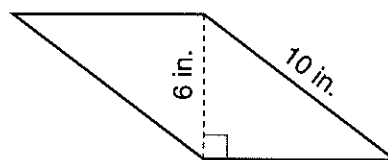
2.



Number model: _____

Area: _____
(unit)

3.



Perimeter = 36 in.

Number model: _____

Area: _____
(unit)

4. On the back of this page, explain how you solved Problem 3.