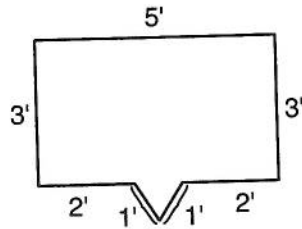


STUDY LINK
8•1

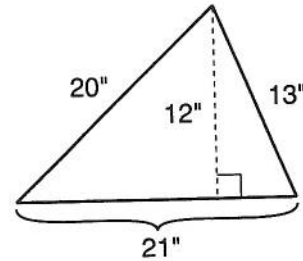
Perimeter



1. Perimeter = _____ feet



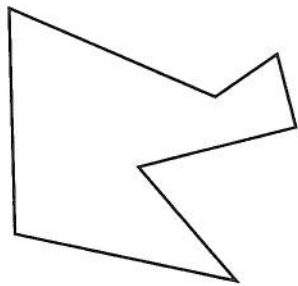
2. Perimeter = _____ inches



3. Draw a rectangle *BLUE* whose perimeter is 16 centimeters. Label the length of the sides.

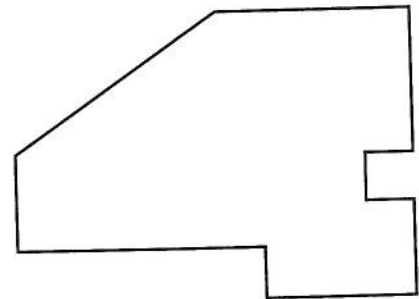
4. Draw a different rectangle *FARM* whose perimeter is also 16 centimeters. Label the length of its sides.

5. Measure the sides of the figure to the nearest centimeter. Label the length of its sides. Find its perimeter.



Perimeter = _____ centimeters

6. Measure the sides of the figure to the nearest $\frac{1}{4}$ inch. Label the length of its sides. Find its perimeter.



Perimeter = _____ inches

Practice

7. $\frac{1}{4}$ of 24 = _____

8. _____ = $\frac{2}{3}$ of 24

9. _____ = $\frac{5}{8}$ of 40

STUDY LINK
8•2

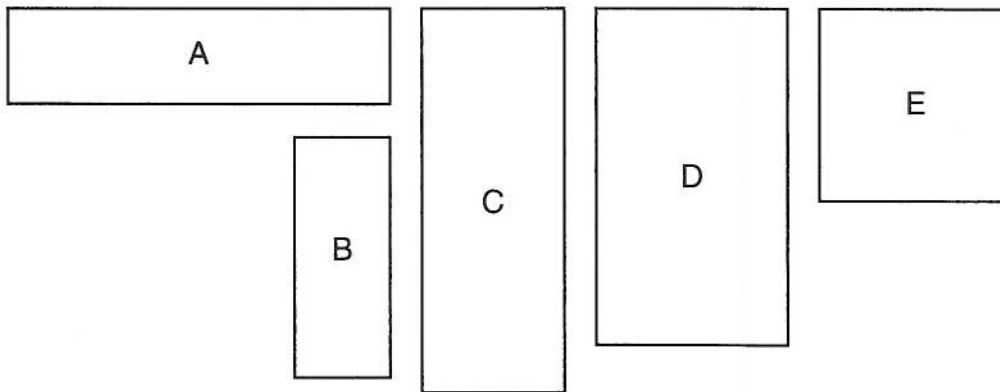
Scale



1. If 1 inch on a map represents 13 miles, then
 - a. 4 inches represent _____ miles.
 - b. 9 inches represent _____ miles.
 - c. $2\frac{1}{2}$ inches represent _____ miles.
 - d. $13\frac{1}{2}$ inches represent _____ miles.
2. The scale for a drawing is 1 centimeter:5 meters. Make a scale drawing of a rectangle that measures 20 meters by 15 meters.

Try This

3. Scale: $\frac{1}{4}$ inch represents 6 feet. Measure the height of each rectangle to the nearest $\frac{1}{4}$ inch. Complete the table.



Rectangle	Height in Drawing	Actual Height
A		
B		
C		
D		
E		

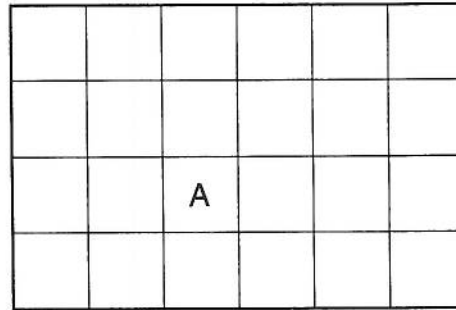
STUDY LINK
8•3

Exploring Area



1. Rectangle A at the right is drawn on a 1-centimeter grid. Find its area.

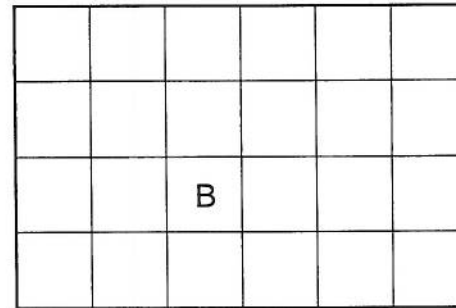
Area = _____ cm^2



2. Rectangle B has the same area as Rectangle A. Cut out Rectangle B. Then cut it into 5 pieces any way you want.

Rearrange the pieces into a new shape that is not a rectangle. Then tape the pieces together in the space below. What is the area of the new shape?

Area of new shape = _____ cm^2


Practice

3. $1,778 + 294 =$ _____

4. _____ $= 6,096 + 5,644$

5. $4,007 - 414 =$ _____

6. _____ $= 8,030 - 5,182$

STUDY LINK
8•4

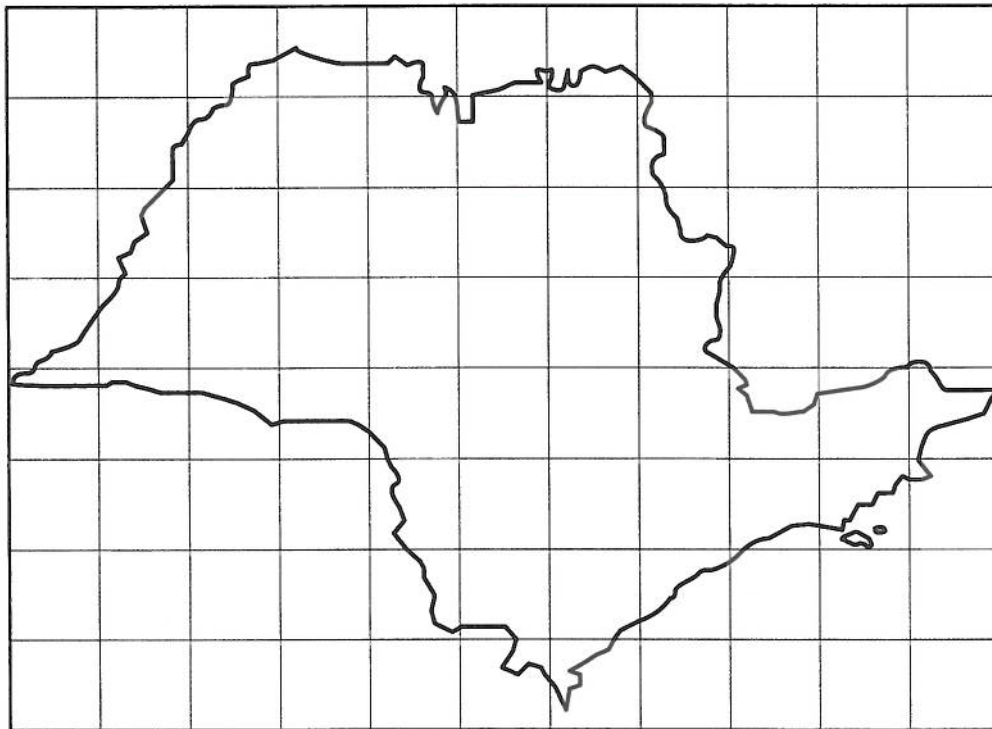
Areas of Irregular Figures



1. Below is a map of São Paulo State in Brazil. Each grid square represents 2,500 square miles. Estimate the area of São Paulo State.

I counted about _____ grid squares.

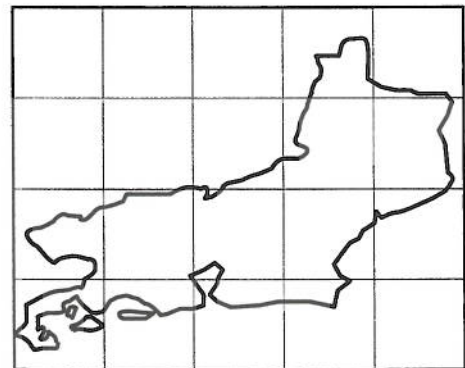
The area is about _____ square miles.



2. To the right is a map of Rio de Janeiro State in Brazil. Each grid square represents 2,500 square miles. Estimate the area of Rio de Janeiro State.

I counted about _____ grid squares.

The area is about _____ square miles.


Practice

3. _____ = $73.04 + 15.67$

4. $86.05 - 27.97 =$ _____

5. _____ = $312.11 + 74.064$

6. $57.1 - 39.002 =$ _____

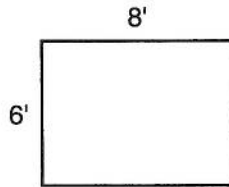
STUDY LINK
8•5

Areas of Rectangles



Find the area of each rectangle.

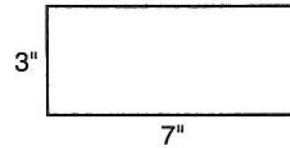
1.



Number model: _____

Area = _____ square feet

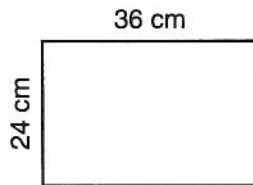
2.



Number model: _____

Area = _____ square inches

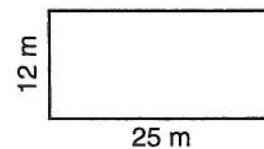
3.



Number model: _____

Area = _____ square centimeters

4.



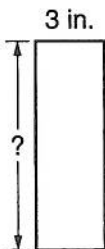
Number model: _____

Area = _____ square meters

Try This

The area of each rectangle is given. Find the missing length.

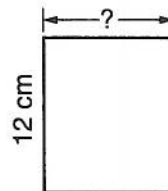
5.



Area = 27 in^2

height = _____ in.

6.



Area = 120 cm^2

base = _____ cm

Practice

7. 3, 6, _____, 12, _____, _____, _____

8. 14, 21, _____, _____, 42, _____, _____

9. 30, _____, 42, 48, _____, _____, _____

10. 12, _____, 36, _____, 60, _____, _____

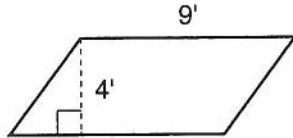
STUDY LINK
8•6

Areas of Parallelograms



Find the area of each parallelogram.

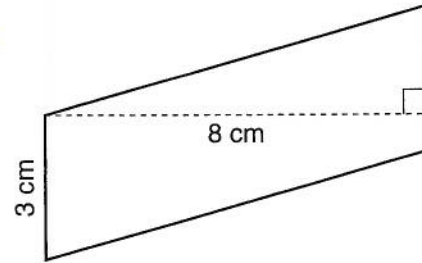
1.



Number model: _____

Area = _____ square feet

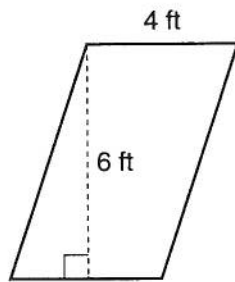
2.



Number model: _____

Area = _____ square centimeters

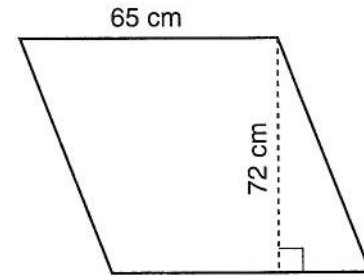
3.



Number model: _____

Area = _____ square feet

4.



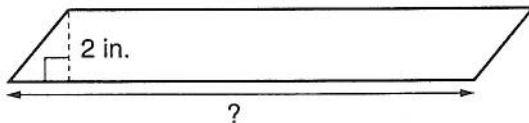
Number model: _____

Area = _____ square centimeters

Try This

The area of each parallelogram is given. Find the length of the base.

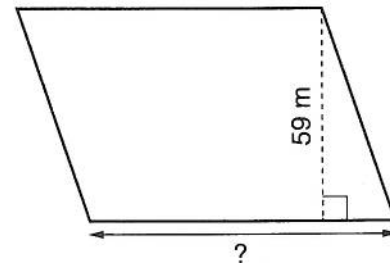
5.



Area = 26 square inches

base = _____ inches

6.



Area = 5,015 square meters

base = _____ meters

STUDY LINK
8•6

Percents in My World



Percent means “per hundred” or “out of a hundred.” *1 percent* means $\frac{1}{100}$ or 0.01.



“48 percent of the students in our school are boys” means that out of every 100 students in the school, 48 are boys.

Percents are written in two ways: with the word *percent*, as in the sentence above, and with the symbol %.

Collect examples of percents. Look in newspapers, magazines, books, almanacs, and encyclopedias. Ask people at home to help. Write the examples below. Also tell where you found them. If an adult says you may, cut out examples and bring them to school.

Encyclopedia: 91% of the area of New Jersey is land, and 9% is covered by water.

Newspaper: 76 percent of the seniors in Southport High School say they plan to attend college next year.

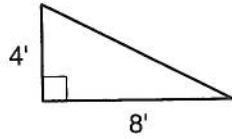
STUDY LINK
8•7

Areas of Triangles



Find the area of each triangle.

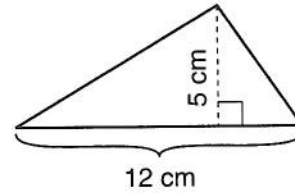
1.



Number model: _____

Area = _____ square feet

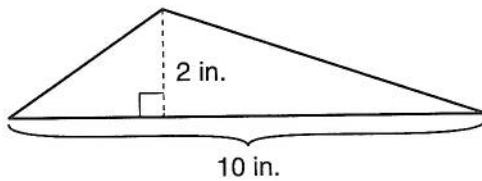
2.



Number model: _____

Area = _____ square cm

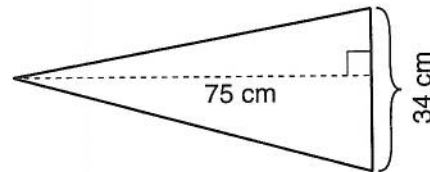
3.



Number model: _____

Area = _____ square in.

4.



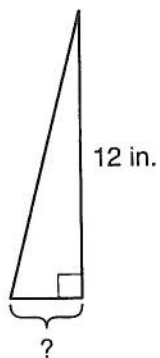
Number model: _____

Area = _____ square cm

Try This

The area of each triangle is given. Find the length of the base.

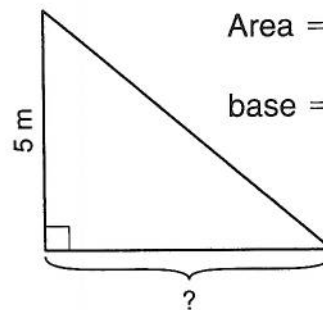
5.



Area = 18 in^2

base = _____ in.

6.



Area = 15 m^2

base = _____ m

Practice

7. 18, _____, _____, 45, _____, 63, _____

8. _____, 16, _____, 32, _____, _____, 56

STUDY LINK
8•8

Turtle Weights



Turtle	Weight (pounds)
Pacific leatherback	1,552
Atlantic leatherback	1,018
Green sea	783
Loggerhead	568
Alligator snapping	220
Flatback sea	171
Hawksbill sea	138
Kemps Ridley	133
Olive Ridley	110
Common snapping	85

Source: *The Top 10 of Everything 2004*

- The Atlantic leatherback is about 10 times heavier than the _____ turtle.
- The loggerhead is about _____ times the weight of the common snapping turtle.
- Which turtle weighs about 3 times as much as the loggerhead? _____
- The flatback sea turtle and the alligator snapping turtle together weigh about half as much as the _____ turtle.
- About how many common snapping turtles would equal the weight of two alligator snapping turtles? _____
- The Atlantic leatherback is about $\frac{\square}{\square}$ the weight of the Pacific leatherback.

Practice

Name the factors.

7. 50 _____

8. 63 _____

9. 90 _____